

# SHINRYO REPORT 2024 Corporate Profile and Sustainability Report

**English Version** 



# Management Vision "Create a Freshening World"

#### - Brand Promise -

We would like to provide a comfortable air quality appropriate for where we work, spend our time, and in the surrounding natural environment. We would like to create a rich and pleasant environment.

We, Shinryo Corporation strive to realize an even more comfortable and pleasant lifestyle by providing optimal air quality around the world.

As a means to this end, we strive to provide new value through flexible thinking by heightening the technology we have cultivated up until now even further while sincerely responding to the customers.

We will continue to strive to realize a "Freshening World" by pursuing to offer greater value.

#### SHINRYO Report 2024

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#### **Editorial Policy**

The intent of this report is to help all of our stakeholders to deepen their understanding of Corporate Social Responsibility (CSR) activities at Shinryo Corporation.

Some of the images in this report differ from current occupational health and safety measures, but all of the images are either images taken after measures were taken for inclusion in this report or images taken before the measures began.

#### **Target period**

This report focus on FY2023 (October 1, 2022 to September 30, 2023), including some periods before and after.

#### Scope of report

Sustainability Promotion activities of Shinryo Corporation and the Shinryo Group.

#### Reference guidelines and

- standards
- ISO 26000
- GRI StandardsEnvironmental Reporting
- Guidelines (2018) • Task Force on Climate Related
- Financial Disclosures (TCFD)

#### Date of publication January 2024

#### Division responsible for

publication Shinryo Corporation Sustainability Promotion Department, Corporate Strategy and Planning Division

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#### Informational Dissemination System

Main Publications such as Pamphlets	ns such as Website ets			
All activities such as financial	and non-financial information			
SHINRYO Report 202	4 (Japanese/English)			
Corporate information	Comprehensive corporate activities SHINRYO Corporation homepage (Japanese/English) https://www.shinryo.com/en			
Employment information	Technology Technology and Services website https://www.shinryo.com/tech/			
	Employment Information Employment website https://www.shinryo.com/saiyo/			
Various technical catalogs	Sustainability Promotion Activities Sustainability Promotion Website https://www.shinryo.com/sustainability/			

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### Aiming to Become a Future and Environmental Engineering Company

2024 is a significant year for Shinryo Corporation. We need to make it the year we can remember as achieving great strides toward the future. 2023 was the year that Japan overcame the COVID-19 pandemic and brought back normalcy. Inbound needs have recovered and accommodation and retail industries are operating favorably. The construction market was estimated to decline after the Tokyo Olympics in 2021 but continues in maintaining a robust state. Orders received and net sales of Shinryo Corporation are also robust. The construction industry is expected to face further shortage of labor due to the revised Labor Standards Act which will be in effect from April 2024. In addition, we need to consider that the domestic construction market is unlikely to show significant growth in the mid- to long-term perspective and there is a possibility of slowdown in market growth.

Looking overseas, tension is rising due to various issues such as conflicts and wars around the world, financial instability, and inflation. Although the international economy overall is relatively stable, with mainly Asia expected to show steady growth. Our overseas business also showed a steady trend. With the Japanese government announcing GX investment of 150 trillion yen in public and private sectors by fiscal 2032, Japan has initiated its transition toward a decarbonized society. We have also set targets for reducing greenhouse gas emissions by 50% by 2030 and achieving carbon neutrality by 2050 with the hope of becoming a "Future & Environmental Engineering Company" that contributes to the realization of a decarbonized society through cuttingedge technology.

### Technological Capability and Organizational Strength as Driving Forces

As stated above, drastic changes in the labor market are expected in 2024. I believe companies that can quickly adapt to changes will achieve significant growth. We have been preparing for this for many years, by measures including improving productivity of construction sites since 2013, launching Refreshing Work Style Project in 2016, and launching Challenge 45, a project with the aim of limiting monthly over time to under 45 hours, in 2021. We are also consciously working to increase the effectiveness of the work style reform through construction process innovation with DX (*P***P3-54**).

Improvement of productivity and effectiveness require strengthening of both technological capability and organizational strength. In terms of technological capability, we were awarded First Place Winner in the Commercial Buildings (New) category of the 2023 ASHRAE Technology Awards hosted by the world's largest international academic conference on air conditioning. This was due to the building being highly praised for the implementation of environmentally-friendly technologies in which we were involved in its continued development and improvement of their operations. We will continue to develop technologies that contribute to the decarbonization of society (@**P35**).

In terms of organizational strength, I believe having high organizational strength will realize both work style reform and improvement of productivity. The 15th Three Year Management Plan launched in October 2022 has four strategies. Strategy 1: Improve On-Site Reforms and Engagement; Strategy 2: Expand Core Business Strategies; Strategy 3: Strengthen Business Development Capabilities Prioritizing Green & Digital Domains; and Strategy 4: Promote a Digital Transformation based on the vision "Transformation for Growth." One target of the 15th Three Year Management Plan is operational process innovation named "From Individuals to Organization." Each construction site has worked independently from each other until now but we will strengthen the back office function that supports the construction sites and the use of off-site bases to coordinate the three sites and realize a high quality and highly efficient construction process. This construction process innovation has been implemented across Japan and is steadily progressing. DX Promotion Division established in 2022 is executing company-wide DX initiatives and playing an important role in realizing construction process innovation (@ P9-10).

In addition, new construction processes that fully utilize

the BIM were put to practice in the construction of the new main building of the Innovation Hub completed in November 2023. Its effects and issues were reported to the BIM Model Project of the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) which we have been participating in for the three years since 2020. The new main building implements the numerous latest decarbonization technologies that we have developed and we were able to acquire precious knowledge. The Innovation Hub will strongly promote active exchange between the industry, government, and academia as well as being open innovation to function as a platform for creating and disseminating new values (*P***P11-12, P50**).

Shinryo Corporation is focusing on activities to promote sustainability and formulated a human rights policy as well as announced its support for the Task Force on Climate-related Financial Disclosures (TCFD) in 2023. We are also actively engaged in various activities based on the policies of the United Nations Global Compact and Sustainable Development Goals (SDGs).

In 2024, we will achieve higher productivity by promoting construction process innovation to strengthen technological capability and organizational strength. We will work hard to make the year remembered as the year that built the foundation for our exponential growth.

Shinryo Corporation will continue to work to reflect the feedback we receive from all of our stakeholders in our business activities in order to become a company chosen by customers. I ask for your ongoing support and guidance in the future as well.

#### 15th Three Year Management Plan (68th Term to 70th Term)

- Long-term Vision 2030 Future and Environmental Engineering Company
- 15th Three Year Vision
  - "Transformation for Growth"
- Strategies to Achieve Goals Strategy 1: Improve On-Site Reforms and Engagement
  - Strategy 2: Expand Core Business Strategies
  - Strategy 3: Strengthen Business Development Capabilities Prioritizing Green & Digital Domains
  - Strategy 4: Promote a Digital Transformation

### Message from the Vice Presidents and General Managers

#### Promoting Open Innovation for Corporate Growth

The reason Shinryo Corporation exists is to use environmental technology to realize a sustainable world through preserving the global environment, in addition to delivering creative technologies and global new values. The new main building of the Innovation Hub was completed in November 2023. We will strongly promote open innovation using this as an opportunity. We are aiming to achieve corporate growth through the development of technology and business in the Green & Digital field, which is the social trend and a pillar for the next generation. In addition, we will evaluate the effectiveness of the decarbonization technologies we have developed and implemented in the new main building while also taking on the challenge of implementing advanced construction process through the use of BIM and digital technology, off-site production, and the back office. Shinryo Corporation will solve social issues through continuously taking on challenges and continue being an attractive company that continuously grows.



#### Tetsuro Kochiya

Representative Director, Executive Vice President General Manager, Technical Supervision Division & in charge of Group Health and Safety & Compliance & the Environment



Takeo Yamaguchi Executive Vice President Representative of West Japan & General Manager, Osaka Branch

#### Solving Social Issues with Technological Capability

Trend of SDGs and ESG investments are active in the society. With the increase of needs for decarbonization and digitalization, needs for planning and proposal from a perspective of sustainability have increased more than ever. Furthermore, the importance of enhancing corporate competitiveness has increased in the recent unstable international and economic situation. In such a social environment, providing optimum technology depending on the characteristics of each building instead of providing them uniformly and continuing to challenge building a sustainable business model based on the belief that change is constant and understanding of the possibility of growth in the market is required. We will diligently research customer needs and contribute to their energy and resource saving efforts while the customers can trust also actively pursuing efficiency of construction to offer construction equipment that.

#### Responding to the Trust of Customers through Technological Capability and Proposals

Construction equipment that requires a high level of technological capability such as large-scale urban redevelopment, semiconductors, and EVs are increasing in the construction market. In addition, philosophy behind the SDGs and sustainability became wide spread in society and decarbonization and energy saving have become an important management issue for companies. As Shinryo Corporation is involved in building energy related facilities such as manufacturing equipment, district heating and cooling systems, data centers, medical facilities, and other various social infrastructures, the role we have to fulfill is increasing year by year. We will strive to enhance our technological capability, which is our strength, whilst also enhancing our proposals through the use of BIM and DX in order for the customers to feel sure entrusting project to us. We will contribute in realizing a sustainable society as an "Future & Environmental Engineering Company."



Takao Watanabe

Director, Executive Vice President General Manager, Marketing Supervision Division

### Creating a Freshening World through Business Activities

Shinryo Corporation has pursued offering an ideal environment that is friendly to people and nature since its founding. Through our journey, we came to a conclusion that our business activities and the goals of the SDGs are fundamentally aligned and are focusing on promoting sustainability that align with the SDGs. In 2023, we have formulated a human rights policy and endorsed the TCFD Recommendations. The revised Labor Standards Act will come to effect in the construction industry from April 2024. We started work style reforms in 2016 and have been working to improve productivity and employee satisfaction since then. We aim to build a work environment where diverse human resources can work operate in a lively manner and fully exert their potential. Sixteen companies of the Shinryo Group will work to "Create a Freshening World" through their businesses and take on the challenge of creating new values as well as contributing to solving social issues.



#### Koichi Kaji

Director, Managing Executive Officer General Manager, Corporate Management Division & in charge of Group Management and Sustainability Promotion



Katsuhiko Yakita Managing Executive Officer General Manager, DX Promotion Division

#### DX that Maximizes Strength of Construction Sites

Trends of increasing efficiency and innovating businesses using DX are also becoming more prevalent in the construction industry. Shinryo Corporation is working on the grand design of "DX that Maximizes Strength of Construction Sites" to innovate construction process based on the pillars of digitalization, industrialization, and systemization. We will enhance our strength and create new values through making advancements in the visualization of data and coordination, as well as strengthening our knowhow and knowledge base. Going forward, provision of optimum solutions will become possible through advanced analysis and the use of AI. As such, we will develop human resources that autonomously promote and execute DX based on advanced information. A decarbonized society can be realized only by fully utilizing technology. We will continue to grow toward "A Company Helping to Realize a Sustainable and Decarbonized Society through Advanced Technology" to create a sustainable society for the future.

#### United Nations Global Compact and Sustainable Development Goals (SDGs)







Sustainable Development Goals (SDGs)

The sustainability promotion activities of Shinryo Corporation refer to the United Nations Global Compact and Sustainable Development Goals (SDGs). Shinryo Corporation is advancing sustainability promotion management and business activities that have adopted the ten principles in four areas (human rights, labor, the environment, and anti-corruption) of the United Nations Global Compact as well as the concepts in the 17 SDG targets.

These efforts demonstrate the will of Shinryo Corporation to grow as a company earning trust from the international society as it focuses its strengths into the provision of technology overseas.

### Value Creation Process

Shinryo Corporation employs a value creation process that earns trust and delivers new value to customers through technology. We contribute to solutions to social issues by providing safe and secure equipment systems offering energy and resource savings to a variety of business regions. The most important Shinryo asset and strength are people, which are also our driving force.



The business environment surrounding the Shinryo Corporation is dramatically changing. We established the Long-term Vision 2030 to anticipate and transition these changes into business opportunities by responding to the external business environment from medium- to long-term perspectives while heightening our value creation capabilities. Our vision is to deliver refreshingness to the world. The aim of the Shinryo management vision to create a freshening world will enhance sustainable corporate value.



#### Output

#### **Financial Capital**

#### esults of Business Performanc

#### FY 2023

- Consolidated operating income:
- 19.5 billion yen
- Consolidated net assets: 172.7 billion yen
   P17-18

#### contribute to a Decarbonized Society

- Reduce greenhouse gas emissions
- Commendation awards for energy savings
- Research and development of technology to save, generate, and store energy

🤗 P11-12/P31-38

🤗 P39-46

#### Contribute to a Resilient Society

- Provision of High-efficiency, Highquality Systems
- Praise of technology through the internal commendation program

#### ealize Safe and Highly Efficient Work Processe

- Quality improvements and prevention of technological trouble through construction executed based on quality manuals
- Prevention of human error
- Active use of digital technologies
   Ø P9-10/P47-52

#### uild Refreshing Environments Rich with Creativit

- Increases in the rate of paid leave taken by employees
- Higher employee satisfaction
- 2023 Certified Health & Productivity Management Outstanding Organization
   Acquisition of Eruboshi (2 stars) certification
- Ø P53-62

#### Strengthening of Business Foundation

- Work Style Reform Promotion
- Implementation of diversity training
- Active investment in education
- Active investment in research and development

#### @ P11-12/P53-58

#### Outcome

Higher Sustainable Corporate Value Realization of the Management Vision

#### **Management Vision**

#### "Create a Freshening World"

#### - Brand Promise

We would like to provide a comfortable air quality appropriate for where we work,

spend our time, and in the surrounding natural environment.

We would like to create a rich and pleasant environment.

We, Shinryo Corporation strive to realize an even more comfortable and pleasant lifestyle by providing optimal air quality around the world.

As a means to this end, we strive to provide new value through flexible thinking by heightening the technology we have cultivated up until now even further while sincerely responding to the customers.

We will continue to strive to realize a "Freshening World" by pursuing to over greater value. The construction industry faces many issues including the decline in labor force and long work hours, and in turn needs to increase operational efficiency and productivity to combat such issues. Shinryo Corporation is promoting digital transformation (DX) to solve these issues through digitalization and contribute to the realization of a sustainable and decarbonized society with advanced technology.

#### Providing New Value with DX

Each building construction has different specifications and conditions as each building has a different shape and facilities. As such, mechanization, automation, and standardization were thought to be difficult. Shinryo Corporation is taking on the challenge of construction process innovation with three pillars of digitalization, industrialization, and systematization to contribute to the improvement of productivity and construction quality throughout the construction industry. In addition, we are enhancing our technological capability while also advancing the development of human resources that can promote and carry out DX. We will provide new values to the society through DX including decarbonization technology, life cycle assessment (LCA) with BIM, and optimum solution with the use of AI.



#### **Construction Process that Shinryo Corporation Envisions**

Conventionally, operations related to construction were done all on-site. Shinryo Corporation aims to innovate the process to optimize the entire on-site operations and make the operations more efficient by coordinating the construction site, off-site base, and back office through sharing BIM and other data.



#### Three Initiatives to Innovate Construction Process

#### Digitalization Use of BIM in All Aspects

We are utilizing BIM and other digital technologies in all aspects of operations on-site.

In terms of construction, we are promoting the robotization and automation through the use of robots that draw construction blueprints that fully automatically draw construction data on floors by using BIM data (**P35**) and automatic generation of diagrams for manufacturing equipment units that are installed in construction sites. In addition, we utilize new digital technologies such as process management system that visualize the progress of construction with a 3D model of a building (**P49**).



#### Industrialization Improvement of Productivity and Construction Quality through Off-site Manufacturing

We are promoting off-site manufacturing which air conditioners and piping are pre-manufactured as units at plants and warehouses, and transported to construction sites to be installed and assembled. Industrialization of prefabrication method which air conditioning ducts and other parts are manufactured at plants is being promoted by directly sending data on dimensions of processed goods and number of orders to the manufacturer based on digitalized construction information.



Unit production at partner company factory

#### Systemization Cooperation with Back Office

We are accelerating the digitalization through BIM and ICT to create an environment where operation can be also carried out from outside the construction sites. We have built a back office system for systematically conducting construction operations by identifying operations that can be conducted outside the construction sites and standardizing them. We are conducting this initiative in cooperation with the deployment of human resources company Global Staff of Shinryo Group (@P64).



Blueprint adjustment meeting with a construction site

### TOPICS

#### Practical Application in Construction of New Main Building of Innovation Hub

Construction of the new main building of the Innovation Hub completed in November 2023 (**P11-12**) put construction process that fully utilized BIM into practice. Its effects and issues were reported to the BIM Model Project of the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) to contribute to the promotion of BIM in Japan.

(Initiative on BIM Model Project of MLIT is available on  ${$ 

Initiatives	Effects, etc.
Participation in BIM Model Project of MLIT	Achievement reports for FY 2020 - FY 2022 Results report
Unitization and prefabrication of materials and equipment	80% implementation
Automation of marking using robots	40% implementation
Shift of on-site operations to the back office	60% implementation



BIM model of new main building of the Innovation Hub

#### Feature 2

2 Construction of New Main Building of Shinryo Innovation Hub Challenge Toward Decarbonization

The Innovation Hub is taking on the challenge of achieving effectively zero greenhouse gas emissions from research and development activities by 2030 which we named "Innovation Hub-CN2030." We will introduce new decarbonization technologies in the facility, analyze their effects, and share many valuable finds during this challenge with the society.

#### Vision of Innovation Hub

In 1990, we opened the Japan's largest facility in the industry, the Research and Development Center, in Tsukuba City, Ibaraki. The center has been providing various energy saving and renewable energy technologies to the society. In 2022, the center was renamed to the Innovation Hub to promote open innovation in response to the changes in the social landscape and speed of technological advancement. We are focused on three themes of realization of a decarbonized society (GX), use of digital technology and innovation of operational and manufacturing processes (DX), and collaboration. In November 2023, new main building of the Innovation Hub, a platform for creating and disseminating new values, was completed.



Three Themes of Innovation Hub Initiatives

#### Innovation Hub-CN2030

The Innovation Hub is working on "Innovation Hub-CN2030,"\*<sup>1</sup> an initiative aiming to achieve effectively zero greenhouse gas emissions through research and development activities.

The new main building acquired ZEB\*<sup>2</sup> certification with the its introduction of various decarbonization technologies and renewable energy, reducing greenhouse gas emissions by 50%.

Going forward, we will strive toward carbon neutrality through research and development of decarbonization technology and renovation of existing facilities.

\*1 CN: Carbon neutral

\*2 ZEB: Building with net zero annual primary energy consumption

#### Plan of Innovation Hub-CN2030



Acceleration of GX, DX, and collaboration

(Company-wide initiatives on carbon neutrality: @P31-34)

#### 1. Completion of New Main Building

The new main building implements highly efficient equipment, photovoltaic generation system, and various energy saving and renewable energy technologies to realize ZEB and reduce primary energy consumption from the design stage by 114% compared to the base value. Through these initiatives, the hub acquired highest BELS ranking of  $\star \star \star \star \star$ .

The building also acquired CASBEE - Wellness Office S Rank for being recognized as a building that realize both decarbonization and comfortable workplace.

#### Implementation of decarbonization technologies and renewable energy that realized ZEB

- Implementation of highly efficient heat source equipment
- Reduction of power consumption of fans with variable-air-volume conditioning system
- Reduction of load on air conditioning with outdoor air cooling
- Reduction of outdoor air load with full heat exchanger
  Implementation of photovoltaic
- generation system
  Implementation of highly efficient LED
- lighting etc





Highest BELS Rank ★★★★★ CAS ZEB Certification S Ra

CASBEE - Wellness Office S Rank

#### 2. Toward CN2030

The following new decarbonization technologies were developed and implemented in the new main building. We will strive toward carbon neutrality through analyzing the effectiveness of these technologies.

#### Three-pipe Dynamic Range Chilling Heat Source System

Three-pipe dynamic range chilling heat source system is a system that connects heat source equipment that supply cooled water at different temperatures with three piping systems. Efficiency of the system is improved by supplying water from the heart source equipment to each air conditioner at optimum temperature depending on the heat load and outdoor air conditions.



#### 4th Dimension Minienvironment Air Conditioning System

4th dimension minienvironment air conditioning system is an air conditioning system that combine floor radiant air-conditioning and blowing air from floor ducts using reversable fans. The system creates a comfortable temperate environment with lower energy use by controlling air flow volume of each space according to the movement of people.





#### CFD-connected PMV Control\*1

\*1 CFD: Computational Fluid Dynamics

CFD-coordinated PMV control estimates the room environment in the near future based on temperature, humidity, and other measurements along with weather forecast with CFD technology. Furthermore, the system controls the room environment to be comfortable based on the estimate with minimal energy.



PMV: Predicted Mean Vote. An indicator for how people feel temperature.

Realization of comfortable room environment

#### Variable-air-volume Coanda Air Conditioning System

This air conditioning system using the Coanda effect creates a jet of air flowing along the ceiling, which eliminates the need for duct space. This system realizes greater energy savings of blower power by delivering a uniform airflow to every corner of the room, regardless of the strength of airflow.



air conditioning system



Constant autonomous wind speed device Air-Soarer®\*2

\*2 Air-Soarer® was developed jointly by Mitsubishi Jisho Design Inc., Shinryo Corporation, Shibaura Institute of Technology, and Kyoritsu Air Tech Inc.

### **History of Shinryo Corporation**

### Aiming to Create a Freshening World

This section introduces the history of Shinryo Corporation, which was founded in 1956, that has been cultivated to its efforts in developing people toward achieving the management vision to "Create a Freshening World."

#### 1956-1968

#### Founding and Trajectory

- 1956 Established our Head Office at 45 Nishikubo Tomoecho, Minato-ku, Tokyo and founded Received our first order for cooling equipment work at the
  - Kaori cafe and restaurant
- 1957 Received an order for Shin-Otemachi Building, the largest building in Japan at that time, and established the foundation of our company •Received an order for full
  - retrofitting of construction equipment at the Fuji Tsushinki Manufacturing Kawasaki plant
- 1958 Opened the Osaka Office



Shin-Otemachi Building Air conditioning System



- 1965 Developed and installed Japan's
- first "3-pipe Air-conditioning System" in the head office of Nippon Fudosan Bank 1966 • Opened the Hiroshima Office
- 1967 Opened the Sendai Office
- 1968 Deployed three engineers on a fact-finding mission in the U.S.A Introduced a skyscraper building application and refriderator computer control at the World Trade Center Building

#### 1969-1977

#### Enhancement of Division-based Organization System and Expansion to New Business Regions

- 1969 Opened the Fukuoka Office Received an order to install a district heating and cooling system at the Senri New Town Chuo District Center Received an order to install a district heating and cooling system in Shinjuku Fukutoshin District
- 1970 Completed the new headquarters building •Established the industry's first research center for air conditioning technology Established the Nuclear Power Plant Department to enter the energy plant industry for nuclear power use

1971 • Opened the Chugoku Branch 1972 • Received the first order for

full-fledged overseas work at the Vietnam Cho-Ray Hospital Opened the Sapporo Office



Cho-Ray Hospital Air conditioning and sanitation Systems (Vietnam)

- 1975 Opened the Tohoku Branch 1976 • Received the first order for aquarium equipment renovations of the Izu Mito Natural Aquarium (currently Izu Mito Sea Paradise)
- 1977 Opened the Maizuru Plant Received order for the first phase construction of the Kwun Tong Hong Kong Subway Line

#### 1978-1987

#### Evolution of Japanese Business and Expansion of Overseas Business

- 1978 Opened the Hong Kong Branch as a base for overseas expansion
- 1979 Established overseas department as a major pillar of business for overseas expansion Acquired the Level 1 Plumbing
  - Registration from the Ministry of Construction (currently the Ministry of Land, Infrastructure, Transport and Tourism) Developed the NAIAS sludge
- atmospheric flotation concentrator 1982 • Established a local company in
- Hong Kong (SHINRYO (HONG KONG) LTD.) 1983 • Opened the Singapore Branch
- Established a local company in Malaysia SHINRYO (MALAYSIA) SDN. BHD.
- 1986 Established a local company in Thailand (THAI SHINRYO LTD.)
- 1987 Established a local company in Taiwan (TAIWAN SHINRYO CO., ITD.)



The Hong Kong and Shanghai Banking Corporation Limited, HSBC Main Building Air conditioning, sanitation and electric System (Hong Kong)

1970~



District Heating and Cooling System



Development

History of Technical

and

Human

Resource



「あらん限りの誠実を尽くせ 「正しからざることにちするな 学歴年今を問わない 実力ある者が指揮をとれ 社 是

The Company Philosophy clearly expresses the life philosophy and business philosophy of our founder Chairperson Masaru Kagami (deceased). Shinryo Corporation was established to embody this philosophy in the business world. These three principles serve as the "roots" Shinryo Corporation and are the foundation for all thinking, decision-making and action of executives.



Initial Meeting to Establish Shinryo Corporation



The First Members Training at the Takamatsu Dormitory



Enhanced the organization by adopting a division-based organization system Authority was given to each department for the purpose of teaching junior employees



Completed the headquarters building in Yotsuva located in Shiniuku district Accelerated autonomy as an organization



Established the industry's first research center (Osaki, Shinagawa-ku, Tokyo)

#### 2019 to Present

#### Progress Toward a Future and **Environmental Engineering Company**

- 2020 Moved Headquarters (1-6-1, Yotsuya, Shinjuku-ku, Tokyo)
- 2022 Launched the DX Promotion Division •Renamed the Research and Development Center to the Innovation Hub and

restructured its role within the Shinryo Group

- 2023 Moved the Kofu Dormitory to Nishitokyo City
  - New main building of Innovation Hub completed



Kiyohara Smart Energy Center Civil Engineering and Construction of Plant Facilities



Air conditioning System



Jewel Changi Airport Air conditioning and Mechanical ventilation Systems (Singapore)

#### 1988-1997

#### New Mission and Restructuring of Core Businesses

- 1990 Opened the Research and Development Center in Tsukuba Academic Town in Tsukuba City, Ibaraki Established a local company in

  - Established a local company the Philippines (SHINRYO (PHILIPPINES) CO., INC.)
     Received an order from THE LANDMARK TOWER





THE LANDMARK TOWER YOKOHAMA Air conditioning System

- 1992 Opened the Technical
  - Supervision Department and Safety Supervision Department • Passing of Founder Chairperson
- Masaru Kagami 1994 • Established a local company in Indonesia (PT. SHINRYO
- INDONESIA)
- 1995 Received an order for the first overseas district cooling system at the Kuala Lumpur International Airport

#### 1998-2008

#### Establishment of Advanced **Technology Regions**

- 1998 Acquired the ISO 9000s certification Began development of numerical fluid analysis technology using
  - super computers Received an order from the Okinawa Churaumi Aquarium
- 2001 Acquired ISO 14001 certification Received an order for a district heating and cooling system in
- the Marunouchi District 2002 • Received an order for the Sharp Corporation Kameyama Factory



Sharp Corporation Kameyama Factory Air conditioning System

- 2003 Released the 3D-CAD "S-CAD" working drawing CAD for construction equipment
- 2005 Opened the Middle East (Dubai) Branch
- 2006 Moved the Kofu Dormitory to Yokohama 2007
- Established a local company in Vietnam (SHINRYO VIETNAM CORPORATION) • Opened the Abu Dhabi Branch
- 2008 Registered the Research and Development Center as a

Certified Environmental Survey and Odor Measurement Service



Tokyo Dome Air conditioning System





Opened the Research and Development Center (Tsukuba City, Ibaraki)



Passing of Founder Chairperson Masaru Kagami



Start of Japan Invitation Program for Overseas Group Companies



Start of Shinryo Group-wide New Employee Training



Air conditioning/District Heating and Cooling

2009-2018

Perseverance and Organizational

Development to Expand Business Regions

headquarters building (energy saving Eco-project at the

2009 • Started renovations of the

headquarters building)

2011 • Opened the Takahama Plant

2010 • Established the Control & Instrument Engineering Division

2012 • Commemorated for the long-time

2014 • Drafted the "Create a Freshening

Division and Compliance Promotion Division Introduced the overseas practical dispatch system and the overseas short term training system for new employees

2015 • Began on-site training for engineers from overseas 2017 • Standardized an English logo

Toranomon Hills Mori Tower

The Venetian Macao Resort

2020~

System (Macau)

Air conditioning System

2018 • Established a local company in India (SHINRYO SUVIDHA

ENGINEERS INDIA PVT. LTD.)

certification of the environmental management system • Opened the Working Drawing Center

World" management vision • Established the CSR Promotion

Moved Training facility Kofu Dormitory to Nishitokyo City



New main building of Innovation Hub completed

#### Implemented various programs for w employee training and education











### **Corporate Profile**

### Corporate Information

Company Name	SHINRYO CORPORATION
Headquarters Address	1-6-1, Yotsuya, Shinjuku-ku, Tokyo
Date of Establishment	February 23, 1956
Number of Employees (As of September 2023)	2,262 people (non-consolidated) 5,279 people (including Group companies)
Capital	3.5 billion yen

#### Construction Business License (Japan) (As of January 2024)

License Number	(Special 1) No. 3447 issued by Minister of Land, Infrastructure, Transport and Tourism
Date of License	March 11, 2020
Licensed business	Plumbing, Electrical, Machine and Equipment Installation, Building, Civil Engineering, Steel Structure, Interior Finishing, Water and Sewerage Facilities, Telecommunication, Scaffolding, Earthwork and Concrete, Sanitation Facilities
License Number	(Ordinary 1) No. 3447 issued by Minister of Land, Infrastructure, Transport and Tourism
Date of License	March 11, 2020
Licensed Business	Fire Protection Facilities

#### Main Registered Business (Japan)

Senior registered architect office

Registration Number	No.46232 issued by Governor of Tokyo
Date of Registry	April 10, 2021

#### Main qualifiers

Name of certification Number	er of people
Professional Engineer Japan (Engineering Management)	3
Professional Engineer Japan (Environmental Engineering)	42
Professional Engineer Japan (Mechanical Engineering)	3
Professional Engineer Japan (Water Supply & Sewerage)	1
First-Class Plumbing Work Operation and Management Engineer	1,143
First-Class Electric Works Execution Manager	131
First-Class Building Operation and Management Engineer	17
First-Class Civil Engineering Works Execution Managing Engineer	10
1st class Qualified Certified Electrician	31
3rd Class Electric Works Specialist	33
Class A Fire Defense Equipment Officer	329
Class B Fire Defense Equipment Officer	18
1st-class Kenchikushi (Architect)	46
Qualified Person for Energy Management	126
Building Facilities Diagnostic Technician	93
Building Mechanical and Electrical Engineer	231
The First Level Instrumentation Engineer	367
Professional Engineer	5

xPE: Commissioning Professional Engineer)

### List of Executives

President, Representative Director	Takeshi Kagami	
Representative Director	Tetsuro Kochiya	
Directors	Takao Watanabe Koichi Kaji Sayaka Kagami Hideaki Fujizuka	Non-Executive Director Outside Director
Audit & Supervisory Board Member	Yoji Kawai	
Outside Audit & Supervisory Board Members	Toshihito Furuya Koichi Kubo	
President & Chief Executive Officer	Takeshi Kagami*	
Executive Vice Presidents	Tetsuro Kochiya*	General Manager, Technical Supervision Division & in charge of Group Health & Safety, and Compliance
	Takeo Yamaguchi	Representative of West Japan & General Manager, Osaka Branch
	Takao Watanabe*	General Manager, Marketing Supervision Division
Senior Managing	Takeshi Egi	General Manager, Urban Environment Division
Executive Officers	Satoru Narisawa	General Manager, Tokyo Metropolitan Area Division & in charge of East Japan
Managing Executive Officers	Koichi Kaji*	General Manager, Corporate Management Division & in charge of Group Management and Sustainability Promotion
	Katsuhiko Yakita	General Manager, DX Promotion Division
	Tatsuji Yoshimura	General Manager, Asia Business Division
	Kazuto Inabe	In charge of Sales Promotion, Marketing Supervision Division
Executive Officers	Hideki Hagiwara	President & Representative Director, Shinryo Technical Service Corporation
	Takuji Fujisawa	General Manager, Air Conditioning Equipment Division
	Yukitoshi Maeda	General Manager, Innovation Hub
	Hideki Furumoto	In charge of Sales Promotion, Marketing Supervision Division
	Naoki Uchiyama	In charge of Sales Promotion, Marketing Supervision Division
	Koji Murakami	General Manager, Marunouchi Branch
	Masahiko Kitabayashi	General Manager, Yokohama Branch
	Hiromitsu Fujioka	Deputy General Manager, Tokyo Metropolitan Area Division
	Hideyuki Nagasawa	Deputy General Manager, Urban Environment Division
	Shuichi Abe	Deputy General Manager, Marketing Supervision Division
	Takehiro Masuda	' General Manager, Nagoya Branch
	Toshiyuki Shimizu	General Manager, Tohoku Branch
	Shuji Chiba	Deputy General Manager, DX Promotion Division & General Manager, Production Engineering Department
	Toshiya Terao	General Manager, Kyushu Branch
	Hideki Nagato	Deputy General Manager, Urban Environment Division
	Ken Shima	General Manager, Nuclear Power Plant Division
	Minetoku Okamura	General Manager, Electric & Instrument Division
	Motosuke Kadono	Deputy General Manager, Osaka Branch
Executive	Yasunori Abe	

Executive Fellow

\* Executive Officers also acting as Directors

### Organizational Chart



### Overview of the Shinryo Group

The Shinryo Group provides people-friendly and environmentally-friendly air conditioning, water-supply and drainage sanitation, electrical systems, city-friendly and community-friendly district Heating and Cooling Systems, safe and secure plant systems, and comprehensive information systems that support energy savings.

Overseas, the Group also delivers a "Freshening World" by setting up bases primarily in Asia and the Middle East.

Shinryo Corporation Headquarters
 Branches and offices of Shinryo Corporation
 Group Companies



### **Business Performance Trends**

#### Orders received



#### Net sales



#### **Operating income**



#### Number of Companies

Shinryo Corporation 6 Japanese Group Companies 9 Overseas Local Companies

#### **Business Network**

19 overseas bases

#### Net sales

272.9 billion yen

209.2 billion yen (non-consolidated)

Number of Employees



#### Kanto Area

- Shinryo Corporation Headquarters
- Shinryo Corporation
- 12 bases such as branches and offices5 Group Companies

#### Ordinary profit



#### Net assets



#### SHINRYO CORPORATION

Design, construction and maintenance of building system work

Shinryo Technical Service Corporation

Design, construction and maintenance of plumbing, drainage and sanitary service work Shiroguchi Co., Ltd.

Design, construction and maintenance of electric service work

Daiei Denki Co., Ltd.

Design, manufacture, sales, installation and aftercare services of pumps

Shinryo Kougyo LTD.

International tourist hotel

Akita Castle Hotel Co., Ltd.

Deployment and outsourcing of human resources

Global Staff Co., Ltd.

Design, construction and maintenance of buildings and civil engineering/industrial production service work

SHINRYO (HONG KONG) LTD.

SHINRYO TECHNICAL SERVICES LTD.

TAIWAN SHINRYO CO., LTD.

SHINRYO (PHILIPPINES) CO., INC.

THAI SHINRYO LTD.

SHINRYO (MALAYSIA) SDN. BHD.

PT.SHINRYO INDONESIA

SHINRYO VIETNAM CORPORATION

SHINRYO SUVIDHA ENGINEERS INDIA PVT. LTD.

### **Business Fields**

The features of business at Shinryo Corporation are the state-of-the-art construction technology and track record accumulated in Japan and overseas up until now. Our businesses create people-friendly and environmentally-friendly air conditioning, water-supply and drainage sanitation, electrical systems, and leading-edge production environments in addition to city-friendly and community-friendly district heating and cooling systems and comprehensive information systems that support energy savings. Shinryo Corporation will earn the trust of customers and meet their expectations with technology, proven success and sincerity.



#### **Business Items**

 Design and construction of various building services

#### Environmental service work

Air conditioning and mechanical ventilation systems/industrial air conditioning and mechanical ventilation systems/clean room systems/dry room systems/bio-hazard facilities

#### Water-supply, drainage and sanitation

Water supply and hot water supply systems/ soil and waste drainage systems/gas supply systems/kitchen equipment systems

#### Urban utility service work

District heating and cooling systems/energy supply systems

#### **Cogeneration systems**

Power generation systems/heat recovery systems

#### Electrical systems

Power cable systems/Extra low voltage systems/Power receiving equipment and transformer systems/Main & submain power distribution systems/Generator systems

#### Automatic control systems

Building management systems/Instrument equipment systems

#### **Comprehensive information systems**

Various control and management systems for utility plant facilities, industrial production facilities, building facilities, etc.

#### **Firefighting service work**

Automatic fire alarm systems/smoke purge and smoke extraction systems/evacuation guidance systems/indoor and outdoor fire hydrant systems, sprinkler systems and other types of fire extinguishing systems

#### Power plant service work

Ventilation and air-conditioning systems for nuclear power and thermal power plants/ special filtering systems/waste treatment systems

#### Industrial production service work

Pharmaceutical and food plant facilities/ petroleum-related facilities/other plant facilities

#### Special service work

Aquarium facilities/pool facilities/weather simulation facilities/various environmental reliability testing systems/freezing and refrigerating systems/ultra-low temperature and high accuracy temperature control systems

#### > Design and construction of building

Clean rooms/plant buildings/interior finishing work/associated construction work for building services/general building facilities

#### > Sales of air conditioning equipment

Air conditioner and other heating and cooling products/fans and blowers/sanitary ware/ other products related to air conditioning and ventilation





**Plumbing and sanitation** 



District heating and cooling systems



Electrical systems



Plant facilities



**Cogeneration systems** 



### **Construction Track Record**



(Chiyoda-ku, Tokyo)

#### Offices, hotels, and district heating and cooling systems

tin televisit and televisit the set the televisit the set the set the 



Air Conditioning Dai Nagoya Building

(Nagoya City, Aichi Prefecture)



THE LANDMARK TOWER Air Conditioning YOKOHAMA (Yokohama City, Kanagawa Prefecture)



(Chiyoda-ku, Tokyo)



Mizuho Marunouchi Tower (Chiyoda-ku, Tokyo)

Air Conditioning System



Tokyo Sky Tree® District DHC (Sumida-ku, Tokyo)

#### District Heating and Cooling Syster

#### Features of the sc-brain Comprehensive Information System and Main Delivery Record

sc-brain is a comprehensive information system to realize high efficiency operation and energy savings in systems by configuring operational support features to assist the operation of system equipment as well as data management features to analyze energy consumption trends. As a highly universal and easy-to-use system, sc-brain is used in facilities from office buildings and factories to district heating and cooling plants.

#### [Main Delivery Record]

- Sapporo Station area district heating and cooling systems (Sapporo City, Hokkaido)
- Narita International Airport central heating and cooling plant (Narita City, Chiba)
- Adachi Metropolitan Taxation Office (Adachi-ku, Tokyo)
- Marunouchi Center Building/Shin-Marunouchi Center Building (Chiyoda-ku, Tokyo)
- Hisaya-odori Nagoya Municipal Subway Station (Nagoya City, Aichi)
- Osaka Station area district heating and cooling systems (Osaka City, Osaka)
- Japan Post Shin-Osaka Post Office (Osaka City, Osaka)
- Fukuoka City Chiyo area district heating and cooling systems (Fukuoka City, Fukuoka)



Otemachi, Marunouchi 1-chome & 2-chome and Yurakucho Districts DHC (Chiyoda-ku, Tokyo)

District Heating and Cooling System



Minato Mirai 21 Central District DHC (Yokohama City, Kanagawa Prefecture)

District Heating and Cooling System

### Construction track record in districts heating supply operations throughout Japan

72 (Share: 52%)

56 (Share: 40%)

Construction/delivery record/national share

- District heating
- and cooling systems:
  - District with sc-brain:

#### Hokkaido Area

District heating and cooling systems: 3 District with sc-brain: 2

#### Chubu/Hokushinetsu Area

District heating and cooling systems: 9 (Share: 75%) District with sc-brain: 7 (Share: 58%)

#### Kansai Area

District heating and cooling systems: 7 District with sc-brain: 4

#### Kyushu Area

District heating and cooling systems: 1 District with sc-brain: 1

#### Kanto Area

District heating and cooling systems: 52 (Share: 61%) District with sc-brain: 42 (Share: 50%)



Energy Centers, Plants, Hospitals, Building Complexes, Aquariums, Theaters, and Research Facilities



Kiyohara Smart Energy Center (Utsunomiya City, Tochigi Prefecture)

Civil Engineering and Construction of Plant Facilities



Chugai Life Science Park Yokohama (Yokohama City, Kanagawa Prefecture)

Air Conditioning and Sanitation System



Kochi Prefectural Ashizuri Aquarium (Tosashimizu City, Kochi Prefecture)





Water Plant (Omachi City, Nagano Prefecture)





(Toshima-ku, Tokyo)

Osaka Umeda Twin Towers South (Osaka City, Osaka) Heat Source and Air Conditioning Systems



IUHW Narita Hospital (Narita City, Chiba Prefecture)

Air Conditioning and Sanitation System



Takasaki City Theatre (Takasaki City, Gunma Prefecture)

Air Conditioning



Commercial Complexes, Data Centers, Transportation, **Energy Plants and Bio Plants** 



Marina Bay Sands Integrated Resort (Singapore)

Air Conditioning and Mechanical Ventilation Systems



NARRA1 Data Center (Philippines)

Air Conditioning, Firefighting and Electric Systems



MOMBASA PORT DEVELOPMENT PROJECT PHASE-2 (Kenya)

Air Conditioning, Sanitation, Firefighting and Electric System:



Hong Kong West Kowloon Station, Guangzhou-Shenzhen-Hong Kong Express Rail Link (Hong Kong)

Air Conditioning and Electric Systems



**GSPP** Cogeneration Plant (Malaysia)

Plant Facilities/Civil neering and Construction



THAI KYOWA BIOTECHNOLOGIES CO., LTD. (Thailand)

Plant Facilities/Civil Engineering and Construction (Air Conditioning, Sanitation, Firefighting, Electric, and Instrumentation Systems)



International Airport Terminal (United Arab Emirates)

# Sustainability

### Shinryo Corporation Sustainability Promotion Activities

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- 31 Initiatives to Address Priority Subjects
  - 31 Priority Subject 1 Contribute to a Decarbonized Society
    - 31 Adaption to Climate Change
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    - 32 Participation in TCFD Recommendations
    - 33 Initiatives to Mitigate Greenhouse Gas Emissions from the Supply Chain
    - 37 Contributions to Recycling-oriented Society/Biodiversity Conservation

#### 39 Priority Subject 2 Contribute to a Resilient Society

- 39 ES CON FIELD HOKKAIDO
- 41 Singapore Mass Rapid Transit (MRT) Thomson-East Coast Line Stage 3 (TEL3)
- 43 3GeV Synchrotron Radiation Facility "NanoTerasu"
- 44 FUJI FOODS Ibaraki Plant
- 45 Okayama Performing Arts Theatre Harenowa
- 46 Nagasaki City Hall

#### 47 Priority Subject 3 Realize Safe and Highly Efficient Work Processes

- BETTER SPECIAL
- 47 Quality Management System (QMS)
- 49 Initiatives to Improve On-site Construction Productivity
- 50 Challenging Toward New Operational Process with BIM
- 51 Health and Safety Initiatives
- 52 Supply Chain Initiatives

#### 53 Priority Subject 4 Build Refreshing Environments Rich with Creativity

- 53 Work style reform
- 55 Build Refreshing Environments Rich with Creativity
- 57 Human Resource Development Rich with Creativity
- 59 Corporate Governance
- 61 Compliance
- 62 Human rights
- 63 Sustainability Promotion Activities at Shinryo Group Companies
- 65 Social Engagement









### Sustainability Promotion Management

### Toward the development of a sustainable society

Shinryo Corporation started CSR activities by establishing the CSR Promotion Division in 2014. The CSR Promotion Division was reformed into the Sustainability Promotion Division to expand these activities in April 2019. In October 2019, we integrated activity promotion operations with the Corporate Strategy & Planning Division to strengthen strategic activities in accordance with management policies based on the incorporation of the Sustainable Development Goals (SDGs) into management as well as the growing importance of factors such as stakeholder communication.

In 2020, we determined priority SDG subjects (materiality) to engage in through our business activities to tackle social issues. In 2021, we formulated Key Performance Indicators (KPI) to enhance the effectiveness of our work in overcoming these challenges (**P29-30**). We are aiming to integrate the SDGs and management through promoting more specific activities.



### Creating a Freshening World and Contributing to the Development of a Sustainable Society



Sustainability Promotion System

#### Sustainability Promotion System



#### Sustainability Promotion Committee

We have put in place a Sustainability Promotion Committee with the executive officer in charge of Sustainability Promotion as the chairperson to check the status of activities and determine activity policies in order to reflect the feedback we receive from all of our stakeholders and promote better sustainability promotion activities.

#### Sustainability Promotion Department

The Sustainability Promotion Department communicates activity policies defined by the Sustainability Promotion Committee to Shinryo Corporation and Shinryo Group executives to further sustainability activities in coordination with each division. The department publishes the SHINRYO Report by bundling annual activity information for feedback from all of our stakeholders to reflect and improve efforts when drafting activity plans.

#### Priority Subjects (Materiality)

Shinryo Corporation decided upon four SDG priority subjects in 2020. There are six SDG targets of particular importance: 7. Affordable and Clean Energy, 8. Decent Work and Economic Growth, 9. Industry, Innovation and Infrastructure, 11. Sustainable Cities and Communities, 13. Climate Action, and 16. Peace, Justice and Strong Institutions. These priority issues not only fulfill the important social responsibilities for Shinryo Corporation to realize a decarbonized and resilient society but also include goals to better construction sites and provide refreshing environments unique to Shinryo Corporation.

In the future, we will contribute to the realization of a sustainable society by linking the SDGs and management while reviewing these priority subjects from a medium-term perspective based on management plans and social demands.

#### **Decision Making Process**

Shinryo Corporation has furthered its scrutiny into the social issues requiring attention for the sustainable development of society since 2017 through its businesses, incorporating the concepts of ISO 26000 and the Sustainable Development Goals (SDGs) mainly through the medium-term management plan and sort out subjects that we should address. Furthermore, we analyzed the validity of the issues based on the opinions of the management and external experts and determined the priority subjects in 2020.



Continuous revision

Conduct revision according to changes in internal and external environment

#### Four Priority Subjects

Priority Subject 1 Contribute to a decarbonized society



Achieving the goals of the Paris Agreement and realizing a decarbonized society are pressing issues as the impact of global warming becomes more drastic.

As an environmental engineering company, Shinryo Corporation will strive to reduce greenhouse gas emissions and take other such measures in its business activities from design, installation and maintenance to research and development as a way to belo realize a

to help realize a decarbonized society.



Priority Subject 3 Realize safe and highly efficient work processes



More efficient operations and higher productivity are essential issues when considering the labor shortage in the Japanese construction industry. Internationally, human rights of workers and labor management have also become issues.

Shinryo Corporation will establish safe and highly efficient work processes with the goal of realizing safe work-friendly environments and efficient

construction site operations.





With escalating risks of natural disasters, the construction of strong infrastructure is essential to ensure sustainable corporate activities as well as safe and secure life in society.

Shinryo Corporation helps build safe, long-lasting social infrastructure by providing high-efficiency, high-quality systems and proposing optimal maintenance and renewal plans.





The construction industry in Japan faces the major challenges of reforming long work hours and building flexible work environments.

Shinryo Corporation will build workplaces where diverse human resources are motivated and each can reach their full potential with the goal of realizing refreshing, highly productive company rich with creativity.



#### Participating Initiatives and External Evaluation

#### **Participating Initiatives**

- United Nations Global Compact (September 2014)
- Task Force on Climate Related Financial Disclosures (November 2023)
- Climate Change Initiative (February 2021)
- Keidanren Declaration on Challenge Zero (June 2020)
- Keidanren Initiative for Biodiversity Conservation (June 2020)
- Declaration of Partnership Building (May 2023)

#### **External Evaluations**

- 2023 Certified Health & Productivity Management Outstanding Organization (Large Enterprise category)
- Two-star "Eruboshi" certification of the Minister of Health, Labour and Welfare
- Nikkei SDGs Management Survey 2023 (3.5-star)
- Nikkei Smart Work Management Survey 2023 (Three-star)
- **Main Commendations**
- American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) "2023 ASHRAE Technology Awards", First Place Winner in the Commercial Buildings (New) Category -Shinryo Shinjo Building-





### ♥パートナーシップ ↓ 構築宣言冊---



### Initiatives to Address Priority SDG Subjects

Shinryo Corporation formulated key performance indicators (KPI) in 2021 and put its full efforts behind them in 2022 to solve the priority issues (materiality) determined in 2020. We have set these targets focusing on the activities done in the past to propel those initiatives forward.

We will ingrain these activities through the employees with an understanding that Shinryo Corporation's ongoing efforts will

Priority Subjects (Materiality)	Policy	Action Plan	Key Performance	
Priority Subject 1	Reduce greenhouse gas emissions from business	<ul> <li>Reduce Scope 1 direct greenhouse gas emissions</li> <li>Reduce Scope 2 indirect emissions associated with energy sources</li> </ul>	Reduction rate of Scope 1 and 2 emissions	
Contribute to a decarbonized society	activities	Promote designs and proposals to reduce greenhouse gas emissions from Scope 3 Category 11 emissions (use of sold products)	Implementation rate of design proposals to reduce greenhouse gas emissions during system operations	
<b>※</b> 🐼	Strive to employ the latest energy-saving technologies	Broadly promote energy-saving technology throughout the society by soliciting entries for external energy- saving commendations and other such initiatives	_	
Priority Subject 2 Contribute to a resilient society	Contribute to building resilient social infrastructure	<ul> <li>Provide resilient, efficient, and high- quality equipment and systems</li> <li>Recognize technology through an internal commendation program (President's Awards)</li> </ul>	_	
	Improve productivity on construction sites	Streamline construction sites and promote a digital transformation	_	
Priority Subject 3 Realize safe and highly	Provide high quality equipment and systems	Improve quality and prevent technical issues through construction carried out according to a quality manual	Construction cycle implementation rate	
efficient work processes 8 root work and 0 more measure 0 more measure measure 0 more measure measure measure m	Manage safe and work-friendly constructions sites	Prevent human error by strictly following operational procedures that incorporate risk management	Frequency rate	
	Improve fair evaluations of engineers and construction quality	Promote the expansion of the construction career up system	Construction career improvement system registration rate of Safety and Health Council members	
	Achieve the ideal work style for the Shinryo Corporation • Work-friendly environment	<ul> <li>Fully execute the medium- to long-term</li> </ul>	Employee satisfaction	
Build refreshing environments rich with creativity	<ul> <li>with a refreshing and open corporate climate</li> <li>Pride, satisfaction, a sense of accomplishment, and growth</li> <li>A fulfilling work-life balance</li> <li>A work style driving maximum results in a limited amount of time</li> </ul>	plans and achieve the three-year vision • Advocate the work style reforms promoted in Priority Subject 4 as one initiative - Refreshing Work Style Project - Challenge 45	Rate of annual paid leave taken by employees	
	Comprehensive Compliance	Implement comprehensive compliance education	Participation rate in compliance training	

lead to solving SDG issues. In doing so, we are actively creating opportunities to deepen employee understanding of the SDGs, such as e-learning addressing SDG themes and cross-organizational expansion of activity results through committee members executing sustainability initiatives.

		Activity Results		Medium-term			
Indicators (KPI)	FY2021	FY2022 Activity Results	FY2023	Reference page	Management Plan (15th Three Year Management Plan)		
<ul> <li>Base year for greenhouse gas reductions: 2009</li> <li>Greenhouse gas emissions</li> <li>50% reduction by 2030</li> <li>Net zero by 2050</li> </ul>	<b>37%</b> *FY 2020 Results	<b>30%</b> *FY 2021 Results	<b>40%</b> *FY 2022 Results	11-12, 31, 34	Strategy 3 Strengthen		
100% implementation rate	97%	100%	100%	34	Business Development Capabilities Prioritizing Green & Digital		
_	Award-winning te	35-36	Domains				
— Main initiatives and award-winning technology published in the SHINRYO Report			39-46	Strategy 2 Expand Core Business Strategies	Strategy		
_	Main initiatives published in the SHINRYO Report			9-10, 35, 49-50		4 DX pro	
100% implementation rate	_	100%	100%	47-48		motion	
Frequency rate of 0.40 or less	<b>0.14</b> *FY 2020 Results	<b>0.28</b> *FY 2021 Results	<b>0.40</b> *FY 2022 Results	51			
Registration rate of 80% or more	72%	79%	82%	51	Strategy 1 Improve		
<b>4.0 or higher</b> *Index based on internal research (Evaluation on a scale from 0 to 5)	_	3.2	3.3	55	On-Site Reforms and Engagement		
Year-on-Year Increase	<b>85%</b> (21 points increased compared to previous fiscal year)	87% (2 points increased compared to previous fiscal year)	92% (5 points increased compared to previous fiscal year)	54			
100% participation rate	_	93%	100%	62			

### **Initiatives to Address Priority Subjects**



# Contribute to a Decarbonized Society





Achieving the goals of the Paris Agreement and realizing a decarbonized society are pressing issues as the effects of global warming grow.

Shinryo Corporation will strive to reduce greenhouse gas emissions and other such measures in its business activities from design, installation and maintenance to research and development as a way to help realize a decarbonized society as an environmental engineering company.

### Adaption to Climate Change

Japan announced its commitment to carbon neutrality in October 2020 calling for net-zero greenhouse gas emissions by 2050. In April 2021, the government also announced its target to reduce greenhouse gas emissions 46% by fiscal 2030 compared to 2013 levels.

The realization of decarbonized society is an important obstacle to overcome to enable sustainable development of society. Shinryo Corporation promotes the six items below to ensure effective initiatives solutions to realize target.

- Promote an Environmental Management System(EMS)
- Identify and mitigate greenhouse gas emissions
- Promote labor savings as well as BIM and a digital transformation on construction sites
- Leverage technologies that use renewable energy
- Accelerate research and development of decarbonization technologies
- Implementation of decarbonization technologies in our facilities

As KPI of the SDG priority subjects, we aim to reduce Scope 1 and 2 greenhouse gas emissions by 50% by 2030 as part of our efforts to realize carbon neutrality by 2050. Our efforts in Scope 3 emissions have set a 100% implementation rate of design proposals for greenhouse gas emission reductions during system operations as a KPI and are striving to propose better technologies to customers.

In November 2023, we have declared our support for the recommendations of the Task Force on Climate Related Financial Disclosures (TCFD). We will analyze risks and opportunities related to climate change in our business activities and implement measures for them.



KPI Outline of KPI for Priority SDG Subjects (Detailed List on @ P29-30)

#### Road Map to 2050

#### 2050 Net Zero Greenhouse Gas Emissions



### Environmental Management System (EMS)

Shinryo Corporation has been using an Environmental Management System (EMS) for more than two decades since acquiring the ISO 14001 certification (MSA) from the Management System Assessment Center in 2001. Shinryo Corporation will bolster its EMS initiatives to contribute to the realization of a decarbonized society.

#### **Basic Philosophy**

As a company connected to the environment, Shinryo Corporation has been practicing environmental preservation through building equipment based on our mission to Create a Freshening World.

We actively work to reduce our environmental burden and conserve the global environment in the future.

#### **Environmental Policy**

Shinryo Corporation recognizes its social responsibility in realizing a sustainable society.

In doing so, Shinryo Corporation will acknowledge the needs and expectations of its stakeholders and conduct the following to balance business development and environmental conservation.

1. We shall control greenhouse gas emissions in business activities to realize a decarbonized society.

2. We shall promote the 3Rs\* of construction byproducts to realize a recycle-oriented society

3. We shall put in place and utilizes proper business processes to comply with all laws, regulations, and requirements.

Each one of us will operate under an Environmental Management System and commit to make a contribution to ensure these initiatives are effective.

We will raise awareness about this policy with not only our employees but everyone involved in our businesses.

\*3Rs: Reduce, Reuse, and Recycle

#### **Environmental Promotion System**



#### ISO 14001-certified Divisions, Branch Offices, and Administrative Sections

- Tokyo Metropolitan Area Division
- Urban Environment Division
- Air Conditioning Equipment Division
- Nuclear Power Plant Division
- Electric & Instrument Division
- Hokkaido Branch
- Tohoku Branch
- Marunouchi Branch

- Yokohama Branch
- Hokuriku Branch
- Nagoya Branch
- Osaka Branch
- Osaka Branch
- Chugoku BranchKvushu Branch
- Kyushu brahch
- Innovation Hub
- Administrative Sections

### Participation in TCFD Recommendations

Task Force on Climate Related Financial Disclosures (TCFD) founded at the request of G20 recommends companies and agencies around the world to understand business risks and opportunities related to climate change and disclose relevant

information. Shinryo Corporation endorsed the TCFD Recommendations in November 2023. We will contribute to the realization of a decarbonized society through strategically tackling climate change.

#### Response to estimated climate change risks and opportunities

Types of risks and opportunities		Details of risks and opportunities Impa		Initiative description
	Political and	Carbon tax and purchase of emission rights	Medium	Promotion of EMS activities (Reduction of Scope 1 - 3 emissions)
	regulation risks	Increase in load due to complying with laws and regulations	Medium	Decarbonization of our facilities
l ransition risks	Market risks	Increase in energy and procurement costs	Medium	DX promotion and promotion of productivity (off-site production, etc.)
	Reputation risks	Decline in trust from stakeholders and reputation	High	ZEB certification, development and implementation of decarbonization technology, and participation in the Japan Climate Initiative
Physical	Acute risks	Increase in natural disasters, typhoons, spread of infectious diseases, etc.	High	BCP, DX promotion, and promotion of productivity (off-site production, etc.)
risks	Chronic risks	Decline in labor productivity due to rise in average temperature	Medium	Promotion of EMS activities, DX promotion, improvement of productivity, and automation of construction
		Increase of needs and orders for renewable energy technologies, etc.	High	Development and implementation of decarbonization technology
Opportuniti	ies	Demand for improved productivity in construction sites	High	Utilization of BIM, DX promotion, improvement of productivity, and automation of construction
		Expansion of ZEB and renovation market	High	ZEB certification, utilization of BIM, and recycling of construction byproducts

\* Evaluating impact on business activities and finances as high, medium, and low. Changes depending on fluctuations in climate, market, and financial environment

### Initiatives to Mitigate Greenhouse Gas Emissions from the Supply Chain

Shinryo Corporation has identified hot spots that impact the environment by calculating Scope1, 2 and 3 greenhouse gas emissions. Of the 5,591,000 ton-CO<sub>2</sub> emissions in fiscal 2022, most emissions came from Scope 3 Category 11: Use of Sold Products.

Shinryo Corporation actively engages in numerous initiatives to help mitigate greenhouse gas emissions from not only construction but throughout the entire life cycle of construction equipment such as efforts to propose solutions to customers and improve productivity.





Y2022 Scope 1, 2 and 3 Calculation Results*	(Constr	ruction Site	s for P	roperties w	ith C	Orders of	f 30 Million	Yen	or Mor	e
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Cat	egory	Calculation scope	Result (ton-CO <sub>2</sub> )
Sco	ope 1	Direct emissions from fuel consumption at Shinryo facilities, leakage of fluorocarbons, and use of company vehicles*3	867
Sco	ppe 2	Indirect emissions from the use of electricity and heat purchased by Shinryo facilities	1,755
Sco	ope 3	Indirect emissions from third-party companies involved with business activities (total of all categories)	5,589,091
	1 Purchased goods and services	Emissions from resource harvesting and manufacture of sold goods	293,778
	2 Capital goods	Emissions from manufacture and construction of capital assets	593
	3 Fuel and energy activities not included in Scope 1 and Scope 2	Emissions from manufacture such as electricity and fuel bought by the headquarters, branches and offices	453
~	4 Upstream transportation and distribution	Emissions from transportation of goods from seller to construction sites	35,233
Cate	5 Waste generated in operations	Emissions from disposal of waste produced on construction sites	3,316
gory *2	6 Business travel	Emissions from fuel and power consumption of transportation agencies used for business travel of employees	1,086
	7 Employee commuting	Emissions from electricity consumption of transportation agencies used for employee commuting	523
	11 Use of sold products	Emissions from the operation of building equipment after delivery (operation period set to 15 years)	5,254,001
	12 End-of-life treatment of sold products	Emissions from duct and piping waste during demolition	108
Tot	al of Scope 1 to 3		5,591,713

\*1 Calculations based on the Basic Guidelines on Accounting for Greenhouse Gas Emissions throughout the Supply Chain (Ver2.5) from the Ministry of the Environment and the Ministry of Economy, Trade and Industry

\*2 Categories 8 through 10 and 13 through 15 are activities not related to our businesses

\*3 The scope of emissions from the use of corporate vehicles in fiscal 2021 expanded from the headquarters to the entire company



#### Scope 1 and 2 Reduction Initiatives

Shinryo Corporation aims to reduce greenhouse gas produced by its business activities by 50% compared to 2009 levels by 2030 and reach net-zero emissions by 2050.

Shinryo Corporation has been putting its strength behind broader decarbonization and energy savings. We rolled out the energy saving Eco-project to fully renovate the old headquarters building for energy savings in 2011, while introducing several decarbonization technologies into the Shinryo Shinjo Building (@P35) erected in 2020 and the new main building of the Innovation Hub (@P11-12) erected in 2023 to reduce greenhouse gas emissions at each facility.



Scope 1 and 2 reduction rate (Target: 50% by 2030; Net zero by 2050)



#### Scope 3 (Category 1 and 4) Reduction Initiatives

We are promoting efficient management of construction sites by using BIM and taking advantage of ICT based on appropriate construction plans to reduce greenhouse gas emissions from the production of materials and equipment purchased at construction sites and during transportation.

#### Scope 3 (Category 5) Reduction Initiatives

Shinryo Corporation strives to properly sort and recycle waste to reduce the greenhouse gas emissions produced by processes to manage industrial waste.

Of the industrial waste produced on construction sites, Shinryo Corporation promoted recycling of four main materials (concrete, metal scrap, waste plastics, and waste glass, ceramics and pottery) and outsourced recycling to industrial waste disposal and recycling companies with superior processing technology and achieved 90% recycling rate in fiscal 2023.

#### Scope 3 (Category 11) Reduction Initiatives

Shinryo Corporation has set a 100% implementation rate of design proposals for customers as a KPI to reduce the greenhouse gas emissions during the use of building equipment. These design proposals encourage customers to upgrade to optimal facility systems with effective energy savings through airflow and temperature distribution simulations using industry leading CFD\* technology, consideration for adopting and commissioning highly energy saving facilities, and systems that greatly reduce energy consumption.

\* CFD: Computational Fluid Dynamics

#### (*P* P49-50)

Shinryo Corporation has actively used these technologies to improve productivity and achieved a 25% reduction in  $CO_2$  emissions in fiscal 2023.

CO<sub>2</sub> emission reduction rate





#### Implementation Rate of Design Proposals



#### Scope 3 (Category 11) Reduction Initiatives

Shinryo Corporation promotes greater decarbonization and energy savings in construction equipment as an environmental engineering company. Each construction site works to reduce

Awarded as the First Place Winner by the World's Largest International Academic Conference on Air Conditioning

Shinryo Shinjo Building

Shinryo Shinjo Building which Shinryo Corporation, Mitsubishi Jisho Design Inc., and Shibaura Institute of Technology have been involved in its design, construction, and analysis was awarded as the First Place Winner in the Commercial Buildings

(New) category of the 2023 ASHRAE Technology Awards hosted by the world's largest international academic conference on air conditioning.

Shinryo Shinjo Building has implemented numerous decarbonization technologies we have developed, including variable-air-volume Coanda air-conditioning system and dynamic range radiant air conditioning system. We have established these technologies by analyzing their effectiveness through CFD analyses, real scale experiments, and field tests.

Primary energy consumption has been reduced by 75% compared to the base value in the first year of its operations, achieving high level of energy saving. Shinryo Corporation is engaged in activities to continuously reduce greenhouse gas emissions such as developing and adopting optimal heat source control systems that is linked



Exterior

American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) 2023 ASHRAE Technology Awards, First Place Winner in the Commercial Buildings (New) Category

to spreadsheet software even after the building is complete. We will provide the technology and expertise gained from the Shinryo Shinjo Building to contribute to the realization of a decarbonized society.

Scope 3 emissions utilizing various means, such as introducing

decarbonization technologies, higher construction productivity,



\* Excluding electricity not included in the standard primary energy consumption such as electricity consumption by power outlets.

#### **Construction Workflow Innovation**

Robot to Draw Construction Blueprints

When devices, piping, ducts, air vents, and other equipment are installed during installation constructions, location for installing them are marked on the floors of the site. Vast amount of work and time were required as multiple construction workers needed to do it by hand while looking at the blueprint.

Robot to draw construction blueprints developed by Shinryo Corporation can automatically mark various information such as installation location of devices and equipment indicated on the blueprint with accuracy. Through this, it has become possible to construct building without checking the blueprint, enabling appropriate management of construction and instructions for operation. This also leads to avoiding work by hand, reducing left-over materials and other wastes, and improving effectiveness of shipment, which in turn contributes to the improvement of productivity and reduction of greenhouse gas emissions.

These innovations to the construction workflow in the construction site were highly praised as initiatives for work environment design, and received the 21st Environmental and Equipment Design Award (I. M&E Equipment/System Design Category ) from the Association of Building Engineering and Equipment. 21st Environmental and Equipment Design Award of the Association of Building Engineering and Equipment



Floor after drawing completed

#### Standard Operation Ratio of Piping and Duct Construction



Conditioning Engir Technology Awards, F Commercial Buildings

and the use of BIM.

#### Seven and a Half Year Large-scale Renovation While in Use

#### Tokyo Metropolitan Government Building No. 1

Tokyo Metropolitan Government Building is a large-size governmental building where almost 20,000 civil servants work. A large-size renovation work was conducted as years have passed since its opening in 1991 and its equipment have reached their replacement periods.

Shinryo Corporation was responsible for the construction of air conditioning system in the Building No. 1 and contributed to the installation of highly efficient equipment and air conditioning system for buildings with large temperature differences. We

realized both the improvement of room environment and energy saving through improving the thermal environment of rooms and reducing energy used for transferring water and air. Primary energy consumptions of the Building No. 1 and 2 have reduced by 63% (estimated value) compared to before the renovation in fiscal 2000 in fiscal 2021, realizing performance equivalent to ZEB Oriented set by the Society of Heating, Air-Conditioning and Sanitary Engineers of Japan.

In order to conduct construction without stopping civil service and other administrative functions, this seven and a half year long-term construction was

## Environmental Equipment Plan in Accordance with the Local Climate

Exterior

Kama City Hall

The new city hall completed in Kama City, Fukuoka Prefecture in March 2020 is a sculptural rectangle building located next to the Onga River. The Shinryo Corporation was responsible for building the air conditioning, sanitation, and firefighting systems.

In consideration for the unique local climate of the Kama City which outdoor temperature fall at night even during the summer and a natural environment where wind direction tends to constantly change, we combined passive and active systems to coexist with the natural environment. We have also implemented advanced energy saving system. The highly efficient heat source system we built stores water cooled using conducted under meticulous adjustments and relocating and renovating two floors at a time.

11th Renovation Award Special Prize of the Society of

Heating, Air-Conditioning and Sanitary Engineers of Japan

Tokyo Metropolitan Government Building No. 1 and 2 were highly praised for the large-scale renovation of a high-rise building and contribution to carbon neutrality through conversion to ZEB, and received the 11th Renovation Award Special Prize of the Society of Heating, Air-Conditioning and Sanitary Engineers of Japan.



37th Awards of Promotion & Technological Promotion of the Society of Heating, Air-Conditioning and Sanitary Engineers of Japan

the lower outdoor temperature during the night and supplies cooled water from the thermal storage tank and medium temperature cooled water from the air-cooled chiller during the day. Outdoor air cooling, natural ventilation, night-time purging, perimeter system that can change simple air barrier, air conditioning system that blow air from floor ducts which have reduced energy consumption for transferring. Though these systems, we were able to reduce annual primary annual energy consumption by approximately 49%\* or approximately 61%\* compared to other standard city halls of the same size when limited to air conditioning system.

\* Measurement value of BEMS implemented in the new city hall



#### Heat source systems of the Kama City Hall



### Contributions to Recycling-oriented Society/Biodiversity Conservation

There is a need to realize a recycling-oriented society that use limited resources and energy efficiently as well as environmental regulations. It is important to ensure efficient use of resources and preservation of biodiversity to avoid affecting the natural ecosystem through excessive consumption of resource and generation of waste. Shinryo

#### **Responding to the Plastic Resource Circulation Act**

Shinryo Corporation is working to separate, collect, and recycle waste plastics that are industrial waste as well as reducing plastic packaging in respond to the Plastic Resource Circulation Act.

#### **Status of Waste Plastic Generation**

Amount of waste plastics generated in fiscal 2023 increased 31% from the previous year but recycling rate of waste plastic from construction sites in Tokyo, which we aggregate and report in compliance with the Tokyo Metropolitan Government Ordinance on Wastes of Tokyo Prefecture , was 93%, indicating that our recycling effort is making progress. We are planning to aggregate recycling rate in the entire company from the next fiscal year to more appropriately respond to the laws and regulations through promoting the reduction and recycling of waste.

#### Waste Plastics Generation\* Trend

FY 2020	FY 2021	FY 2022	FY 2023
1,783t	1,096t	920t	1,213t

Corporation will contribute to the realization of a resource recycling society and preservation of biodiversity through reducing and recycling construction byproducts, use of renewable energy, corporate activities that are eco-friendly, and other measures.

#### **Development of Piping Identification Sheets**

We co-developed piping identification sheet using a new material LIMEX with a manufacturer. Main material used for LIMEX is limestone, which enables the reduction of greenhouse gas emissions by approximately 60% compared to conventional plastic products. LIMEX is an environmentally-friendly product that can contribute to the realization of a recycling society as it can be recycled as materials after use.





LIMEX piping identification sheets

Image of piping identification sheets

\* Aggregated only outsourced constructions

#### Use of an Electronic Subcontracting System and Electronic Manifests

The electronic subcontracting system is able to rapidly conclude waste disposal outsourcing contracts with industrial waste processors system also links to the electronic manifest system to reduce the risk of contract breaches and other legal and regulatory risks.

Since April 2021, Shinryo Corporation has used the electronic subcontracting system to conclude outsourcing contracts with a total of 493 primary contractors in Japan (as of September 30, 2023). In fiscal 2023, 99% of all issued manifests used the electronic manifest system to properly process industrial waste.

#### Usage Ratio Between Electronic and Paper Manifests



#### Rated as Excellent Company (S Class) Under the Energy Saving Act for Four Consecutively Years

Shinryo Corporation was rated as an excellent company (S Class) for four consecutive years from 2019 to 2022 by the Act on Rationalizing Energy Use (Energy Saving Act).

Energy Saving Act was renamed as the Act on Rationalizing Energy Use and Shifting to Non-fossil Energy in April 2023 and revised to promote planned use of renewable and non-fossil energy and a shift to non-fossil fuels. Shinryo Corporation will respond appropriately to the revised Energy Saving Act through implementing planned use of renewable energy and demand-response (DR)\* system.

\* Changing demand pattern of electricity by consumers controlling the amount of electric use.

Overview of the Business Operator Classification Evaluation System (SABC Evaluation System)\*

S Class Excellent Operators	<ul><li>(1) Operators achieved challenging targets;</li><li>(2) or achieved benchmark targets</li></ul>
A Class	Operators had a high standard of energy savings above the B Class, but did not achieve S Class standards
B Class	<ol> <li>(1) Operators did not achieve challenging targets and unit energy consumption rose compared to previous years for the last two years consecutively;</li> <li>(2) or the average unit consumption increased by 5% over the last five fiscal years</li> </ol>
C Class	Operators with particularly poor compliance with discretion standards among B Class operators

\*Created based on Agency for Natural Resources and Energy materials

#### Participation in the Japan Climate Initiative

The Shinryo Corporation participates in the Japan Climate Initiative (JCI). JCI was launched as a network consisting of numerous companies, municipalities, and non-government organizations that actively engage in climate change initiatives. In May 2023, we endorsed the JCI's message of overcoming two crises with renewable energy and carbon pricing announced prior to the G7 Hiroshima Summit, announcing our stance toward contributing to the early realization of decarbonization.

#### Initiatives Toward Conservation of Biodiversity

Shinryo Corporation strives to take in biodiversity and preservation of the natural environment in to consideration in its business and social contribution activities. We are actively fulfilling our responsibility as a member of the society through the development of environmentally-friendly technologies and implementing them in customers' and our facilities; participating in Keidanren Initiative for Biodiversity Conservation and Japan Business and Biodiversity Partnership, which promote biodiversity conservation initiatives; and continuously donating to the Keidanren Nature Conservation

#### Ecological Conservation Activities Enlightenment Program "The Environmental Renaissance Activities"

Fund.

Shinryo Corporation has been conducting the Environmental Renaissance Activities enlightenment program since 2015 for the purpose of heightening employee awareness about ecological conservation.

This program supplies book coupons to employees engaged in activities related to ecological conservation and environmental education to subsidize the purchase of environmental books. This also deepens understanding of ecological conservation and heightens motivation toward ongoing activities. Moreover, these activities have become a matching gift system to donate the equivalent book coupon costs that are supplied over one year to international environment NGOs working to preserve biodiversity and other environmental conservation efforts.

#### Framework of Environmental Renaissance Activities



### **Initiatives to Address Priority Subjects**



Contribute to a Resilient Society Relevant SDGs



With escalating risks of natural disasters, the construction of strong infrastructure is essential to ensure sustainable corporate activities as well as safe and secure life in society. Shinryo Corporation helps build safe, long-lasting social infrastructure by providing high-efficiency, high-quality systems and proposing optimal maintenance and renewal plans.

#### Supporting the Revitalization of Local Community

### ES CON FIELD HOKKAIDO

Completed: January 2023 Total floor area: 120,432m² Facility application: Baseball stadium, hotel, etc.





Inside the stadium (retractable roof when opened)



Stadium exterior



Cogeneration systems

#### About the ES CON FIELD HOKKAIDO

ES CON FIELD HOKKAIDO is a new baseball stadium for the Hokkaido Nipponham Fighters built in Kitahiroshima City, Hokkaido. An Area named Hokkaido Ballpark F VILLAGE covers approximately 32 hectares, housing the stadium, commercial facilities, agriculture learning facility, gramping facility, residences, certified childcare facility, and other facilities. The area is a bedrock for community building centered on the stadium. Going forward, vitalization of the local community is expected with the construction of elderly care facilities and hotels as well as the opening of a JR station.

The stadium has a capacity of about 35,000 people (approx. 30,000 seats) with Japan's first stadium having both a retractable roof and a natural turf field. The stadium was excavated to below the ground level and designed to make the four-floor viewing stands to feel closer to the field. Mid-section of the building is designed with terraces to blend with the surrounding community. The stadium houses restaurants, kid's area, museum, Asia's first hotel with rooms that the visitors can directly watch the game during their stay, and other facilities to allow visitors to enjoy their stay throughout the year not only through watching a game.

The stadium also acts as a regional disaster response base of Kitahiroshima City and is equipped with multiple power sources in the form of emergency generator and cogeneration system (CGS), large-size water receiving tank, emergency supply stocks, and other preparations to enable temporary evacuation of approximately 10,000 people.

#### Our Work Air Conditioning and Mechanical Ventilation. Heat Source Systems

Shinryo Corporation was responsible for the air conditioning and mechanical ventilation system and heat source system of the stadium with the aim of creating a comfortable environment for all users.

For air conditioning and ventilation when the retractable roof is closed, 24 air conditioners with a maximum air volume of 90,000m<sup>3</sup>/h and 17 spot air conditioners were installed. We adjusted the angels of the air conditioner outlets vertically and horizontally by units of one degree as well as analyzed the time it takes for the environment to become comfortable after the air conditioning starts based on simulation results of air flow and temperature distribution so that the air conditioner covers all seats. Furthermore, the 360 degree circulating concourse was equipped with spot air conditioners, infra-red heaters, and hot water panel heaters for localized air conditioning, enabling visitors to be comfortable even outside the stands. In consideration for the players to play in a comfortable environment, we installed electric heaters under the benches to keep the dugouts warm during the winter and also painted heat insulation materials gray to avoid air conditioning ducts reflecting light and bothering the players during the game.

The heat source system consists from heat recovery type chilled and hot water generators, vacuum type hot water heaters, air-cooled heat pump chillers, and other equipment. Energy saving is made possible by selecting optimum operation mode from among eight patterns using different equipment depending on the season and conditions. The stadium is equipped with gas cogeneration and emergency power generators to continue operations even during power outages.

BIM was used in the construction to estimate how the ducts in the concourse looked and where the rain would fall to conduct highly precise construction as well as directly sending the BIM data to the processing machine of the duct manufacturer to make the process more efficient.



Air conditioning starts

#### VOICE



Tomohiro Noro (On-site Project Manager) Manager, Engineering Department, Hokkaido Branch

### Pride and Fulfillment of Constructing "A Ballpark the World has Never Seen Before"

As highlighted by the slogan "a ballpark the world has never seen before," this was a completely new large stadium with retractable roof for not only us but for the design company and construction company. Every problem had to be tackled one by one without any foreknowledge. The construction term of the equipment was limited and construction was carried out by up to 23 people from various departments of the company. With everyone working together in coordination across their assigned area, we were able to complete the construction on schedule. Going forward, the stadium will attract even more visitors as the neighboring facilities complete and become a symbol of the community. Taking part in building such a stadium is something I am proud of.

#### Supporting Singapore's Transportation Infrastructure

### Singapore Mass Rapid Transit (MRT) Thomson-East Coast Line Stage 3 (TEL3)

Completed: November 2022 General description: The total length of 13.2 km with 11 stations Facilities usage: Subway train stations and tunnels





Gardens by the Bay Station exterior



Entrance to Gardens by the Bay Station



Tunnel ventilation system

#### **About Singapore TEL3**

Singapore aims to develop a convenient, safe and universally user-friendly land transport system. In its Land Transport Master Plan 2040 (LTMP 2040), Singapore had held up the plan of developing a transportation infrastructure aiming to enable passengers to reach their neighborhood centre within 20 minutes and the city within 45 minutes. In this plan, the government has, in particular, worked on the establishment of new subway lines and stations as well as the extension of existing lines to provide easy access to as many places as possible; presently, a total of six lines has been opened.

The Thomson-East Coast Line runs from Woodlands North Station in northern Singapore to Sungei Bedok Station in the eastern area, serving 32 stations over a total of 43 km. The Thomson-East Coast Line Stage 3 (TEL3) passes through Gardens by the Bay Station with an extensive botanical garden adjacent to Marina Bay Sands, via Orchard Station in the shopping and entertainment district, serving a total of 11 stations over a total length of 13.2 km.



Singapore MRT Network Map

\* Shinryo Corporation has installed Air Conditioning and Mechanical Ventilation Systems at approximately 70% of MRT stations.

#### Our Work Air-Conditioning and Mechanical Vent

After taking charge of the construction of air-conditioning systems for train stations of the Hong Kong subway line in 1979, Shinryo Corporation has built a track record in the field of subway construction in various countries in Southeast Asia, such as Singapore, Thailand and Indonesia. Particularly in Singapore, after taking charge of the construction of air-conditioning systems for train stations and ventilation systems for tunnels on the North–South Line and the East-West Line, the first subway lines in the country, in 1987, Shinryo Corporation has continued to be engaged in projects, providing Shinryo Corporation's technologies for about 70% of all subway lines.

With station building air-conditioning, in order to prevent the exhaust heat from the driving devices of trains from entering the platform, which is an air-conditioned area, we install screen doors to separate the platform and the tracks, which makes it possible to reduce the capacity (burden) of air-conditioners and refrigerators, leading to energy conservation. Also, natural ventilation is normally used for ventilation in tunnels between train stations; however, in preparation for unpredictable events such as a temperature increase in a railway resulting from a sudden stop of a train in a tunnel, we take measures to promote air circulation, such as by operating large ventilation fans with a diameter of about two meters and a capacity of about 270,000 CMH installed at both ends of the train station in combination with pneumatic dampers for rapid ventilation as well as by activating booster fans installed at the intersections of the inbound and outbound lines. In addition, with safety in mind, these ventilation fans are provided with a function that can change the wind direction in either direction as a measure for smoke elimination in case of a fire in a tunnel.

In the construction of a subway line, process control must be carried out in a rigorous manner. According to underground depth, the presence or absence of a transfer line, and the type of platform, the construction method for a train station varies. However, since a subway line cannot be opened until all the train stations and the tunnels have been completed, it is important to integrally control the progress of construction work for all stations. Therefore, in addition to bringing in materials and equipment and securing workers in a planned manner, we engaged in timely exchange of information among persons in charge of each station using an app, and cooperated with many companies such as engineering companies, construction companies and facility management companies, with the aim of advancing construction work effectively and accurately.

#### VOICE



Hironao Koshikawa (On-site Project Manager) Senior Chief, Asia Business Division, Shinryo Thailand

#### **Project Completed by Valuing Communication**

TEL3 was a large-scale project involving the 11 newly established stations and improvement of four stations connected to existing lines, and the work was difficult, requiring 11 site leaders and integrated management of 15 construction sites.

To manage all of the station building and tunnel construction works with the same quality and processes, we made sure to maintain close contact by arranging online meetings with each construction site every morning. With construction work suspended during the COVID-19 pandemic, this became a long-term project lasting seven and a half years, but the approximately 60 site staff worked unitedly to complete the project without any problems. Every time I use the newly launched subway, I feel a great sense of satisfaction.

#### Supporting Cutting-edge Industrial Application and Academic Research

### 3GeV Synchrotron Radiation Facility "NanoTerasu"

Completed: March 2023 Total floor area: 25,184m<sup>2</sup> Facility application: research facility

Miyagi Prefecture



Full View

#### About the 3GeV Synchrotron Radiation Facility "NanoTerasu"

3GeV synchrotron radiation facility "NanoTerasu" is a facility that can visualize the structure and function of materials using an artificial synchrotron radiation\*<sup>1</sup> that is a billion times brighter than the sunlight using electrons accelerated to the speed of light. It is also referred to as a giant microscope for being able to visualize molecules and atoms at a nano level (one billionth). The facility consists of a storage ring building which houses a circular accelerator (storage ring) with a perimeter of 349m and linac building which houses an 110m long linear accelerator. Operations are scheduled to start from fiscal 2024.

In the recent years, use of synchrotron radiation facilities with soft X-ray\*<sup>2</sup> band is increasing. With a facility with world's leading performance, this facility is expected to be used for industrial, medical, foods and other wide variety of industrial fields and increase the development and innovations of technologies in the academic field.

- \*1 Synchrotron radiation: X-ray that is radiated to the direction the electron beam that is accelerated to nearly the speed of light is bent by magnets. It has advantageous properties such as being bright, highly directive, and flexible pollination characteristics.
- \*2 Soft X-ray: X-rays that have relatively long wave length of 0.1 to 10 nano meters, which are more absorbable by materials.

#### Our Work Air Conditioning, Sanitation, Air Compression,

Shinryo Corporation was in charge of building the air conditioning, sanitation, compressed air, and cooling water systems.

For experiments conducted in the nano level, measurements can be affected by minute vibrations and thermal expansion of devices due to temperature change. As such, we not only installed sound dampening devices to exhaust ducts but also to ventilation ducts of air conditioners to reduce air vibration. We also installed exhausts in locations and directions that would not affect the accelerator. In addition, the cooling water supplied to the testing equipment are controlled to mitigate the temperature change to  $\pm 0.2^{\circ}$ C to prevent minute deformation of the accelerator due to temperature change. Furthermore, in consideration for energy saving, we implemented displacement air conditioning system to reduce air volume to lower changes in room temperature.

During construction, we unitized equipment, piping, and ducts to install them at the same time as the steel frame construction to improve efficiency and safety. For the storage ring building, piping was manufactured to fit the circular building, and as such, tool to cut piping at arbitrary angle was used to ensure quality.

#### Supporting Safety and Quality of Food Plants

### FUJI FOODS Ibaraki Plant

Completed: November 2022 Total floor area: 32,850m<sup>2</sup> Facility application: Food plant

Ibaraki Prefecture



Full View

#### About the FUJI FOODS Ibaraki Plant

FUJI FOODS Ibaraki Plant is a food production plant that produces deserts and frozen foods for the Seven-Eleven stores. The plant was built in Yachiyo, Ibaraki Prefecture as the 14th plant of FUJI FOODS.

The plant has various facilities that integrate preparation of raw materials to cooking, packaging, and shipping to offer customers both deliciousness and high quality. The plant also houses freezing and refrigeration room for ingredients, preprocessing room, heat cooking room, cooling and refrigeration room for processed products after cooking, packaging room for packaging foods, and frozen storage. Sanitation, quality, and temperature are thoroughly managed at all stages of the production process as well as measures toward labor saving and automation are taken.

#### Our Work Heat Source, Air Conditioning and Mechanical Ventilation, Freezing and Refrigerating Systems

Shinryo Corporation was responsible for the construction of the heat source equipment for the air conditioning system and air conditioning and mechanical ventilation system as well as freezing and refrigerating system in the production area.

As the facility is a food plant, measures were taken to prevent insects and foreign materials from entering the production line. Such measures include installing highly airtight equipment and insect repellent filters and treating ducts, pipes, and other parts that directly contact the outside. Furthermore, as the cooking room and production equipment generate large amount of steam, we strived to create a sanitary and comfortable working environment by taking measures for condensation and water leaks through ducts that are not segmented and by circulating air inside the ceiling with air blowers.

Maintaining appropriate temperature of stored products is important in the stable supply of high quality products. As frozen storage of the facility is large, we supply cooled air evenly throughout the storage to avoid uneven temperature within the storage. We realized accurate environmental temperature by constructing based on prior analysis of temperature dispersion in the storage using the CFD technology.

#### Supporting Local Culture and Arts

### Okayama Performing Arts Theatre Harenowa

Completed: March 2023 Total floor area: 19,663.13m<sup>2</sup> Facility application: Theater

Okayama Prefecture



Exterior

#### About the Okayama Performing Arts Theatre Harenowa

Okayama Performing Arts Theatre Harenowa was built as a new culture and arts facility for Okayama City that combines the Okayama Civic Hall and Civic Cultural Hall . The hall is an iconic large scale cultural facility in the Chugoku and Shikoku regions with seven floors above ground and two floors underground, housing three theaters, art salon, practice room, and a gallery. The hall supports creative activities of the citizens and cultural organizations through the creation and dissemination of culture and arts under the concept of "Inspire, Gather, and Create."

Harenowa is unique for have large, medium, and small sized theaters dedicated for stage play. The theater is capable to host various performances with its stage equipment that incorporate latest technologies such as the large theater which can host large productions including ballet and opera, the medium theater which is suited for music performances with its movable sound reflecting boards, and the small theater which its space can be used flexibly due to its flat floor design.

The theater also acts as a temporary evacuation site during a disaster and has high anti-seismic performance as well as emergency generators and facility that prevent rain water from entering during torrential rains.

#### Our Work Heat Source and Air Conditioning Systems

Shinryo Corporation was responsible for the construction of the heat source and air conditioning systems and offered optimum equipment for the theaters, studios, and practice rooms based on their different uses and sizes.

For the air conditioning systems, due to the large and medium theater having high atrium, we implemented efficient air conditioning method for the audience seats which exhaust ducts are installed under the seats. We have also analyzed air flow and temperature using CFD technology and placed exhaust and intake ducts to ensure visitors on upper floors to enjoy the performance comfortably. For the heat source equipment, it contributes to energy saving by storing water cooled using electricity at night in water storage tanks during the summer and generating cooled water in the cooling tower for cooling during the winter.

Theaters require high level of quietness. To ensure quietness, sound dampening calculations were conducted before the construction and adjustment of the air volume of air conditioners, installation of and sound dampeners, use of highly soundproof lead sheets for duct penetration parts, and use of other measures were decided based on the results to contribute to the realization of an optimal air conditioning and sound environment.

#### Supporting Administrative Operations with Technology

### Nagasaki City Hall

Completed: November 2022 Total floor area: 51,752m<sup>2</sup> Facility application: Municipal office







City Council Assembly Hall

Exterior

#### About the Nagasaki City Hall

The new city hall of the Nagasaki City was built on top of the former location of the old city council assembly hall, which was a symbol of post-war recovery, due to the aging of the former city hall. The hall has 19 floors above ground and one floor under ground, with lower floors having counters for citizens. The second floor has counters for child raising related matters and space for kids. The plaza at the front of the city hall is used for events and public space for relaxation and the top floor has a rooftop garden to provide a space that is both convenient and comfortable.

The city hall has acquired ZEB Ready certification as a facility that is able to reduce primary energy consumption by 50% compared to the standard value through use of renewable energy and active use of energy saving technologies in consideration for the environment.

#### Our Work Heat Source and Air Conditioning Systems

Shinryo Corporation aimed to construct a facility that is environmentally-friendly and can be used comfortably by the citizens and the staff.

For the heat source system, we implemented heat recovery type chilled and hot water generators that use waste heat from the cogeneration system and highly efficient air cooled heat pump chillers. For the air conditioning system, we implemented radiant air conditioning system that have lower temperature difference and air flow for rooms in work areas and a system that use natural ventilation during transitional seasons such as the spring and autumn to save energy.

The challenge for the city council assembly hall, which consists the fifth and sixth floors, was to extend the air conditioning to the audience seats located at the top section of the atrium. To solve this issue, we used CFD technology to simulate the optimum locations for the exhaust ducts as well as used mixed reality (MR) technology to visualize temperature dispersion to confirm the status with the customer before the construction to realize appropriate environmental temperature.

For construction, we used highly accurate 3D laser measurement device, a robot to draw construction blueprints, unitized outdoor air conditioning units and pumps, and other

ingenuities to improve productivity.



Environmental temperature check with MR technology

### Initiatives to Address Priority Subjects



Realize Safe and Highly **Efficient Work Processes**  Relevant SDGs



More efficient operations and higher productivity are essential issues when considering the labor shortage in the Japanese construction industry. Internationally, human rights of workers and labor management have also become issues. Shinryo Corporation will establish safe and highly efficient work processes with the goal of realizing safe work-friendly environments and efficient construction site operations.

### Quality Management System (QMS)

#### **Quality Policy**

Provide guality earning trust from our customers with all our effort.

Shinryo Corporation acquired the certification for the ISO 9001 quality management system at corporate divisions and branches in Japan and overseas. We practice quality assurance activities according to the quality manual in systems and services based on common company-wide quality policy.

We are also striving to offer quality that can be trusted by making improvements by understanding customer and social needs through customer satisfaction surveys.

#### ISO 9001-certified Divisions and Branch Offices as well as **Overseas Branches**

- Tokvo Metropolitan Area Division
- Hokuriku Branch
- Urban Environment Division
- Nuclear Power Plant Division
- Electric & Instrument Division
- Hokkaido Branch
- Tohoku Branch
- Marunouchi Branch
- Yokohama Branch
- Nagova Branch
- Osaka Branch
- Chugoku Branch
- Kyushu Branch
- HONG KONG Branch
- SINGAPORE Branch



#### **ISO 9001 Internal Auditor Training**

We internally expand latest technology and good practices at construction sites through technical presentations at the Shinryo Forum to provide even higher quality to customers. Shinryo Forum Seminar provides explanations on latest trends in the piping equipment, examples of energy saving proposals through commissioning, and other matters as seminars.

#### **Operational Flow Based on Construction Cycle**

Construction sites implement a construction cycle based on the quality manual. We identify issues related to construction that require discussion and solving through holding construction review meetings at the start of construction, quality patrols as the construction progresses, intermediate inspection, and inspection before completion at an appropriate time. We provide construction guality that meets customer requirements through thorough implementation of the construction cycle which is the foundation for managing construction.







#### Improvement of Construction Quality and Prevention of Technological Trouble

Shinryo Corporation set a 100% construction cycle implementation rate\* as KPI to provide high-guality equipment systems that can be trusted by customers. We will thoroughly implement the construction cycle based on the quality management system (QMS). Implementation rate was 100% in fiscal 2023, achieving our target.

Implementation of the construction cycle leads to the improvement of construction quality of equipment system. As such, we are improving the quality with taking in law and regulations, technical standards, and maintenance and management of the equipment system into consideration. Furthermore, accuracy of quality management has improved through the active use of ICT in confirming the progress of construction.

We are promoting the realization of safe and highly efficient work processes by checking the construction site from multiple perspectives which include management of health, safety, and environment; improvement of productivity; and work style reform.

\* Cumulative result for construction completed during this fiscal year



Construction cycle implementation rate (Target: 100%)

VOICE





Construction status and work environment change daily at construction sites. As such, clarifying issues in construction at an appropriate time according to the progress of construction is important to make improvements. We prevent technical troubles from happening by conducting internal inspections to ensure guality bases on the construction cycle planned before the start of construction. We will also strive for more efficient and reliable management of construction using ICT tools for construction management.

#### **Quality Patrol**

Quality patrol is an operational process to check that the construction is appropriately conducted in compliance with the requirements of the design, laws and regulations, and internal technical standards, and make necessary improvements.

Person in charge of guality management regularly patrol construction sites to verify whether construction is conducted appropriately based on the construction guality plan and blueprint using a checklist. We also check important management items identified by organizing past examples of trouble and customer feedbacks. We strive to improve the construction quality through identifying issues at an early stage through quality patrols and make continuous improvements.



Confirming Construction Status Through Quality Patrols

#### **Quality Management of Specialized Welding Products**

Specialized air conditioning systems, piping, and ducts used in power generation facilities and large-scale plants require more advanced management of welding compared to other buildings. Shinryo Corporation implements a quality management system that integrates design, manufacturing, inspection, and delivery at its Takahama Plant (Fukui Prefecture) to provide products that are high quality and safe to customers. We also handle welding work which is conducted by numerous technicians with welder gualifications as well as non-destructive testing such as penetrant testing.

In February 2023, we acquired welding management "Process Certification I" which complies with private product certification standards for electric facilities. We will continue to provide technically reliable products to our customers.



Welding work at Takahama Plant

### Initiatives to Improve On-site Construction Productivity

#### **Ordering and Process Management Using BIM**

Construction sites use numerous materials and equipment and require appropriate management of the time of order and delivery. Managing progress of construction is also important in doing construction efficiently.

Shinryo Corporation uses a 3D-CAD software that have high affinity with BIM to develop a process management system that manages materials and equipment and progress of the construction with BIM data. We are able to prevent missing orders and duplicate orders as well as gather information for tracking the progress of construction and organizing data through the use of this system. Furthermore, we are also able to make the work more efficient and require less labor by sharing information with parties involved in construction through BIM data.



Order Management with BIM

#### Improvement of Operational Efficiency Using Cloud-based Facial Recognition System

Our construction sites use facial recognition systems to manage the entry and exit of engineers and have adopted a cloud management system that can record working hours. Attendance record per partner company can be automatically generated with the work record data, ensuring accurate management of work hours. Body temperature can be measured at the same time and can be used as a measure against infectious diseases.

This system helps improve the efficiency of on-site management work thanks to the construction career advancement system advocated by the Ministry of Land, Infrastructure, Transport and Tourism as well as the construction industry in addition to our own internal system built to log daily occupational health and safety on construction sites.



Facial recognition system

#### **Construction Technology Training Program**

Shinryo Corporation is actively developing its human resources that can be in charge of construction sites. We conduct internal education on construction technology and troubles to improve the skills of the employees.

We have also prepared training program for dispatch employees that manage construction to enable them to acquire basic knowledge on construction sites such as quality, safety, and rules of the site. This training is also held online to enable access from anywhere in Japan and also offered to Shinryo Technical Service, Shiroguchi, and Daiei Denki of the Shinryo Group. Shinryo Group will work as one to develop human resources to ensure construction quality and improve productivity.



Construction technology training

### Challenging Toward New Operational Process with BIM

#### Participation in BIM Model Project of MLIT

Purpose of construction BIM is to stably supply safe and energy saving buildings through coordinating BIM throughout the planning, design, construction, maintenance, and management of buildings in response to the decline in working population, new work styles, global warming, and other social issues.

The Ministry of Land, Infrastructure, Transport and Tourism (MLIT) has been designating companies engaged in analyzing effects and issues of implementing BIM as subsidized model projects\* during fiscal 2020 and 2022. Shinryo Corporation was the only equipment construction company to be selected for three consecutive years for its theme of identifying the merits and issues for orderers and constructers of buildings when using BIM. We put the use of BIM into practice in the construction of the new main building of our Innovation Hub (@P11-12) and analyzed its effects.

\* Model project for facilitating building production, maintenance, and management processes using BIM.

Source: Based on Vision for the Future and Roadmap to BIM by MLIT (https://www.mlit.go.jp/jutakukentiku/content/001351969.pdf)



#### **Effectiveness Analysis of BIM Use**

In order to smoothly use BIM in the design and construction stages, operation method throughout the lifecycle of the building must be established. As such, we analyzed the effects and issues for merits for the orderer and construction technology consulting work\*. \* Operation to optimize the entire equipment construction by smoothly coordinating BIM between design and construction processes, and rationalizing the construction.



#### **Analysis Result**

As a merit for the orderer, details of the specification can be decided smoothly with completed image of the building and simulated outputs of construction costs and CO<sub>2</sub> emissions calculated based on data of construction materials.

In addition, structural engineering consultancy services have the effect of reducing construction time through front-loading (carrying out structural studies early in the design phase). At the same time, it was necessary to establish rules for linking BIM data between designers and constructors to facilitate consultancy work.

Shinryo Corporation is realizing highly productive construction by utilizing the knowledge gained from this model project and promoting improvements.

KPI Outline of KPI for Priority SDG Subjects (Detailed List on @ P29-30)

### Health and Safety Initiatives

#### Shinryo Group Health and Safety Policy Safety First for our Prosperity

. . .

Shinryo Group has prioritized safety above all else based on the Health and Safety Policy unchanged since its founding. All employees and our partner companies engage in health and safety activities to prevent labor accidents.

To eradicate occupational accidents, it is important to nurture a higher sensitivity to danger and extract latent on-site hazards before we can have the ability to execute any types of countermeasures. Moreover, we are focusing on preventing human error by thoroughly following the work procedures as well as serious disasters caused by unscheduled work.

#### Cooperation with the Health and Safety Council

At the Health and Safety Council participated by partner companies and Shinryo Corporation, we hold education for chiefs and persons in charge of health and safety and various specialized education for acquiring qualifications, with a focus on safety patrol of the construction site conducted every month. Labor safety training targeting business proprietors is held to train business proprietors on their duty to adhere to the Industrial Safety and Health Law as well as comply with the



Patrol by Health and Safety Council

### Promotion to Expand the Construction Career Up System (CCUS)

The Construction Career Up System launched in 2019 is a certification system developed by the Ministry of Land, Infrastructure, Transport and Tourism in cooperation with the construction industry, organizations and other entities for the purpose of certifying the skills and experience that an engineer has amassed from an objective standpoint. The adoption of this system is expected to drive on-site work efficiency by advancing registration of practical experience and the certification of engineers, ensuring fair evaluation of those



Construction Industry Law.

In fiscal 2023, we have strengthened the safety patrol to identify risks and harms in construction sites and provide instructions for improvement to prevent disasters. We have also conducted safety education to dispatch employees working at construction sites to improve the overall safety management capability of construction sites. For education to improve the abilities of chiefs and persons in charge of health and safety, we implemented a system which enable large number of participants to join more efficiently by remotely connecting offices and construction sites across Japan and offices of partner companies.

#### VOICE

Toshitada Watanabe Chairperson of Health and Safety Council President & CEO IIO KOGYOSHO CO., LTD.



Active communication in construction sites plays an important role in preventing labor accidents. In fiscal 2023, we worked to offer guidance on improvement through conducting safety patrols at more construction sites than ever before and promoting more active communication in construction sites, which had declined due to the COIVD-19 pandemic, and to raise safety awareness. Health and Safety Council and Shinryo Corporation will cooperate in promoting health and safety activities to eliminate labor accidents and realize a safe and reliable construction site.



CCUS registration rate of health and safety council members (Target: Over 80%)

skills, and improving construction quality.

Shinryo Corporation promotes the use of this system with the hope of improving construction quality by not only visualizing the careers of individual engineers but also capabilities of partner companies that employ experienced engineers. Therefore, we are rolling out the system to construction sites in an effort to promote its standardization, such as preparing an environment for partner companies to more easily use it.

#### **Overseas Health and Safety Activities**

We have put in place a system that links the Health and Safety Promotion Department of Shinryo Corporation with safety management supervisors at each country and on construction sites to maintain a high-level of safety management while incorporating management techniques in Japan. In fiscal 2023, we aimed to share safety management methods and information horizontally through conducting joint safety patrol with the Safety & Health Promotion Department as well as joint meeting with persons in charge of health and safety.



Safety Patrol at Shinryo Suvidha

#### Promotion of Safety Education and Training

Shinryo Corporation is focusing on providing safety education and training to employees in charge of construction sites. The purpose is to prevent labor accidents through raising awareness about the dangers through understanding the existing dangers and harms in construction sites.

For new employee training and education, we include statutory education on aerial work vehicles, full harness safety belts, and other lectures that are useful in preventing accidents in construction sites for construction managers as well as experiencing disasters using virtual reality (VR) in the curriculum.

#### Asbestos and RCF Management

Shinryo Group has put in place an Asbestos and Refractory Ceramic Fiber (RCF) management system to prevent any adverse health effect on employees, on-site workers, customers, and everyone else involved in its renovation projects. With the revisions to the Air Pollution Control Act and Ordinance on Prevention of Health Impairment Due to Asbestos, prior survey by an asbestos surveyor became a statutory requirement when demolishing and other construction work of buildings from October 2023. As such, about 120 employees acquired the certification. Shinryo Group

### Supply Chain Initiatives



Lecture on Aerial Work Vehicles

works to properly remove and dispose asbestos and RCF by taking advantage of safety patrol on asbestos and RCF as well



Removal of Piping Insulation Containing Asbestos



Spray and Disposal of an Agent to Prevent the Scattering of Asbestos

We are striving to realize a sustainable society in the entire supply chain in cooperation with our partner companies and business partners.

#### **CSR Procurement Guidelines**

We have asked all our partner companies to understand and cooperate in fulfilling corporate social responsibility.

#### Shinryo CSR Procurement Guidelines and Items Therein

- 1. Fair and sound corporate activities
- 2. Quality, safety, and business continuity
- 3. Consideration of human rights, labor, and occupational health and safety
- 4. Consideration of the environment
- 5. Legal compliance
- 6. Management of information

#### **Partnership Building Declaration**

We endorse the philosophy of the Partnership Building Declaration established by the Cabinet Office of Japan, Ministry of Economy, Trade and Industry, and other agencies and declared to build new partnerships by deepening the coordination, coexistence, and co-prosperity with business partners in the supply chain as well as companies that aim to create value.

https://www.biz-partnership.jp/declaration/30451-04-00-tokyo.pdf

### **Initiatives to Address Priority Subjects**



### Build Refreshing Environments Rich with Creativity

Relevant SDGs



The construction industry in Japan faces the major challenges of reforming long work hours and building flexible work environments. Shinryo Corporation will build workplaces where diverse human resources are motivated and can each reach their full potential with the goal of realizing a refreshing, highly productive company rich with creativity.

### Work Style Reform

Shinryo Corporation has been working to reform work styles since 2016. These reforms go beyond simply addressing long working hours as an effort to realize the ideal work style, which should help heighten employee satisfaction. In preparation for the amended Labor Standards Act which goes into effect in April 2024 in the construction industry, we have been engaged in the Challenge 45 project as an aim to limit monthly overtime to 45 hours since May 2021.

#### **Refreshing Work Style Project**

Shinryo Corporation has continued the Refreshing Work Style Project as an initiative working to reform individual employee work styles since 2016. This project shares innovations to enhance productivity, ways to revitalize communication, and other specific measures while striving to raise awareness and spearhead work style reforms.

Every year, we hold the Refreshing Work Style Project Results Briefing in which employees from Shinryo Corporation and Group companies participate online. All of the corporate divisions, branches, and administrative sections and three Shinryo Group companies<sup>\*1</sup> present their success, introducing various examples of work-style reforms, such as communication and management methods using digital tools on construction sites. Each organization focuses on the efforts of other departments in an effort to further reform their work styles under the motto, "Be successful using TTP (*Tettei Tekini Pakuru* (Take Tip Proposals)) by imitating the beneficial actions of others."

To further advance the work style reform, we believe industrywide initiative and productivity improvement are required. As such, we have been submitting request for work style reform to our customers since March 2023. This was led by the sales department and we have submitted requests to over 390\*<sup>2</sup> customers as of the end of July 2023.

\*1 The three Group companies—Shinryo Technical Service, Shiroguchi, and Daiei Denki—involved with system design and installation

#### Ideal Work Style of the Shinryo Corporation

- Work-friendly environment with a refreshing and open corporate climate
- Pride, satisfaction, a sense of accomplishment, and growth
- A fulfilling work-life balance
- Work style driving maximum results in a limited amount of time

#### Some Examples in the Work Style Reform Guidebook (Collection of Case Studies)

#### Job Visualization

- Analyze the time required for a job
- Visualize on-site jobs using white boards

### Reforms to Ensure Work Continues When Jobs Arise Suddenly

• Introduce concentration times and booths

### Preparations to Build a More Work-friendly Environment

- Negotiate and enhance larger on-site offices
- Introduce dual displays

#### On-site Morning Meeting Reforms

- Abolish on-site morning meetings
- Share information on monitors at morning meetings

#### Use of ICT Tools

- Share information using on-site messaging tools
- Conduct project manager meetings online
- Conduct on-site inspections remotely
- Provide video training to new on-site personnel

### Reforms Through Cooperation with Other Companies

- Reform work styles through discussions with construction companies
- Negotiate to eliminate urgent work requests

<sup>\*2</sup> Counted multiple times if submitted to different business divisions or branches of a same company.

Challenge 45 Logo

nallenge

SHINRYO

KPI Outline of KPI for Priority SDG Subjects (Detailed List on @ P29-30)

#### Challenge 45 to Comply with the Amended Labor Standards Act Going into Effect April 2024

In May 2021, Shinryo Corporation launched the Challenge 45 initiative for the purpose of limiting monthly overtime to 45 hours to further heighten the effectiveness of work style reforms. Challenge 45 has set a clear target for overtime per months by challenging employees how many months they can achieve the goal of no more than 45 hours of overtime. If for some reason this goal cannot be achieved, we investigate the cause and use the PDCA cycle to spearhead improvements. Shinryo Corporation will enhance the effectiveness of work style reforms through backcasting which counts back from targets.

#### Challenge 45 Promotion System



Successes Up Until Now KPI Rate of annual paid leave taken by employees 92				oyees <b>92</b> %			
	First Year April 2016 to March 2017	Second Year April 2017 to March 2018	Third Year April 2018 to March 2019	Fourth Year April 2019 to March 2020	Fifth Year April 2020 to March 2021	Sixth Year April 2021 to March 2022	Seventh Year April 2022 to March 2023
Implementation rate of on-site no overtime days and number of model sites striving for work style reform	97% Model Sites Total:142	90% Model Sites Total:121	90% Model Sites Total:229	End of Data Collection Due to Expansion of Initiative to All Sites	-	_	-
Year-on-year change in overtime	-3.3 Points	-2.6 Points	-2.1 Points	+1.7 Points	-2.7 Points	-3.3 Points	<b>—6.0</b> Points
Rate of annual paid leave taken by employees and year-on- year change	60% +3 points year on year	62% +2 points year on year	72% +10 points year on year	64% -8 points year on year	85% +21 points year on year	87% +2 points year on year	92% +5 points year on year

KPI Outline of KPI for Priority SDG Subjects (Detailed List on @ P29-30)

### Build Refreshing Environments Rich with Creativity

Shinryo Corporation strives to cultivate an enthusiastic workplace for employees by realizing a refreshing atmosphere and work-friendly environment.



#### **Promotion of Health Management**

#### Health Declaration

Shinryo Corporation has striven to develop human resources and build a work-friendly environment since its founding based on the belief people are the most valuable asset. We also think supporting physical and mental health is key to cultivating enthusiasm in every employee. The promotion of health management is a critical management challenge for the Shinryo Corporation. In March 2021, our President announced the Health Declaration. This commitment will enhance the vitality of the Shinryo Corporation and contribute to the development of a sustainable society with the hope of realizing our management vision to Create a Freshening World.

#### **Health Declaration**

The Shinryo Corporation is committed to promoting health management.

- 1. We will support the physical and mental health of every employee.
- 2. We will build a workplace where everyone can feel safe and secure to reach their full potential.
- 3. We will heighten the vitality of our organization and contribute to the development of a sustainable society through employees' healthy body and mind, and better workplace environments.

#### Promoting Better Health Toward an Enthusiastic Workplace

Shinryo Corporation conducts various health promotion activities so that every employee can actively participate with health and enthusiasm

To promote health management, we have put in place a system to not only work with the Health and Safety Committee

#### **Progress of Health Initiatives and Target Values**

#### Health Management Promotion System



but also with the health supervisors and managers in charge of health management, and industrial doctors at each business throughout Japan.

Shinryo Corporation focuses on communicating information that helps raise awareness about health. Thus far, we have held lectures on health topics from sleep, smoking, and alcohol to drugs, and infectious diseases as well as distributed health information from public health nurses. With the adoption of a retirement age of 65 in 2020, measures to address the health of older employees have become more important. When renewing contract with employees of ages 65 and above, we check the physical status of such employees through selfevaluation check sheet for falling and other risks. Other health promotion efforts include a Woman's Health Seminar center upon gynecological diseases and illnesses often affecting women as topics for all female employees.

Performance Indicator/Fiscal Year	Annual Health Examination Rate	Rate of Employees Undergoing Necessary Follow-ups/Health Guidance	Rate of Stress Check	Rate of Annual Paid Leave Taken by Employees	Ratio of employees able to sleep for six hours or more
FY 2017	100%	5.4%	99.0%	62.0%	-
FY 2020	100%	69.7%	96.2%	85.2%	35.0%
FY 2021	100%	79.1%	92.4%	87.3%	35.6%
FY 2022	100%	84.9%	95.5%	92.4%	35.8%
FY 2023 Target	Maintain 100%	80%	Maintain 90% or above	Year-on-year increase	-
FY 2026 Target	Maintain 100%	100%	Maintain 90% or above	Year-on-year increase	-
Item	Policie	es/Education			
Physical Health	<ul> <li>Follow-up after regular health checkup</li> <li>Health Consultation Office through the industrial doctors (offered once a week)</li> <li>24-hour health consultation service (telephone/email consultations)</li> <li>Implementation of flu vaccinations right in offices (Headquarters, Yokohama Branch, etc.)</li> <li>Full support for treatments to quit smoking (provides full support to employees who quit smoking for three or more months after starting treatment)</li> </ul>				
Mental Health	<ul> <li>Implementation of stress-checks, creation of opportunities for employees who would like consultations</li> </ul>				

and advice from doctors, and implementation of PDCA to improve the workplace environment

- Consultation Office through industrial mental health professionals (offered once a month) • Implementation of mental self-care education for new employees
- Implementation of mental health education (32 newly appointed managers and 33 specialized education candidates took this program in fiscal 2023)

#### Introduction of Programs to Support Flexible Work Styles

Shinryo Corporation is introducing various policies to encourage employees to take leave thanks to policies and mutual support that build a flexible workplace so that employees can work while taking care of family as well as having and raising children.

Program	Overview
Telework Program	• This program provides work-from-home and other telework options to smoothly execute the Business Continuity Plan (BCP) if working on-site is difficult when pregnant or raising children or when caring for oneself or sick family or in large-scale natural disasters or pandemic-type situations.
Transfer System to Accompany Spouse	• This policy allows employees to transfer when an employed spouse has been transferred if they want to keep working at a Shinryo Corporation office and a place at that office is available.
Come-back System	• This policy allows regular employees who have worked at Shinryo Corporation for more than three years and resigned to (1) raise children, (2) care for family, or (3) transfer with a spouse to return to work within five years of their resignation as a general rule.
Occupational System	<ul> <li>This policy supports ongoing employment by providing work transfers based on the desires of regular employees who would like to limit their work area or type of job according to their circumstances, such as care to a sick family member. We also offer this program to employees hired mid-career.</li> </ul>
Half-day leave acquisition system for annual paid leave	• This system allows employees to take annual paid leave in half day increments.
Expanded administration of an accumulation system	• This expansion allows employees to carry over the number of days left in annual leave to the next fiscal year to use the paid leave they have left the previous year and the year before that for non-work related injuries and illnesses as well as to care for children and other family members.
Special allowances for annual paid leave	• Employees who do not have 20 days of total annual paid leave carried over from the previous year and provided in the current fiscal year may take special leave (paid) according to their tenure at the company in the event of an absence for the reason of sickness after all of the annual paid leave is extinguished.
Leave acquisition promotion system	<ul> <li>Project leave policy: Employees in construction roles may take consecutive leave at appropriate times such as at the completion of on-site construction (up to five business days that may be taken by splitting).</li> <li>Anniversary leave policy: All employees may take leave on days recommended by the company such as their birthday, birthdays of family members or school events (three working days per year).</li> </ul>
Special leave program	• Refresh leave policy: Employees may take designated consecutive leave as commemoration for 10, 20 and 30 years of work.
Maternity leave program for spouses	• This program allows employees to take up to five days of leave from one month before the due date to one year after their spouse gives birth. It also lets employees take leave in half-day increments.

#### Activities to Promote Active Participation of Diverse Human Resources

Shinryo Corporation has established systems and policies to promote and support the active participation of diverse human resources. We also promote the active participation of women and conduct activities to communicate the appeal of the construction industry.

Purpose	Systems/Policies/Events
Promote the success of female employees	<ul> <li>Release of information and action plans based on the Law to Promote Women in the Workplace on the Ministry of Health, Labour and Welfare Positive Ryouritsu website</li> <li>Publication of an Independent Conduct Plan for Female Employees Participation on the Keidanren(Japan Business Federation) website</li> <li>Acquired two-star "Eruboshi" certification of the Minister of Health, Labour and Welfare (June 2022)</li> </ul>
Promote active participation of senior employees with rich experience	<ul> <li>Continue the retirement age to 65 with raises, promotions, and ongoing additions of points for retirement benefits from the date of joining of the company to the age of 65</li> <li>Life plan seminars for 58-year old employees</li> </ul>
Promote active participation of employees hired midcareer	• Implementation of training for new employees (company philosophy, founding spirit, programs and regulations, compliance, occupational health and safety management, disaster prevention measures, etc.)
Promote active participation of foreign nationals	<ul> <li>Japan invitation program for overseas Group companies (annual seminar, but not held in fiscal 2021)</li> <li>Practical technical training of engineers from the SHINRYO (PHILIPPINES) CO., INC.</li> <li>Implementation of a variety of education for overseas branches and overseas Group company staff (compliance, safety, and technical education)</li> </ul>
Promote active participation of employees with disabilities	<ul> <li>Work assignments according to aptitude in fields such as design and legal affairs</li> <li>Establishment of satellite offices equipped with environments offering amenities such as work support systems and barrier-free designs</li> </ul>

### Human Resource Development Rich with Creativity

#### Promotion of Education and Training

Shinryo Corporation plans and launches educations programs centered upon the education and training committee for the purpose of improving business execution skills by bringing understanding of the corporate philosophy and basic philosophy. The Examination Committee drives forward training practically in each department while improving the skills of each employee through promotion examinations.

#### **Development Training System Framework**



#### **Development Training System**

We designate group training and internal testing as required training to recognize the roles of employees and improve their knowledge and skill by level.

New employee training and education provides the training and education necessary for new employees to learn the basics. This program also provides promotions in stages from the second year on by passing internal tests and external certification exams, which takes the skills of managers to the next level. The broad curriculum such as elective external seminars by duty and position and practical education according to department and occupation also establishes a development training system able to ensure the continued learning of each and every employee.

#### Group training by level and year



#### **Training and Education for Diverse Human Resources**

#### Human Resources with Diverse Skills

Shinryo Corporation provides support such as subsidies for the cost of acquiring certifications to employees and incentives for employees who have acquired certifications in order to cultivate human resources who have a high level of technical and specialized abilities and skills. We broadly support not only certifications required by the business but also from a perspective of ability development.

 Technical Professional Engineer, First-Class Plumbing Work Operation and Management Engineer, First-Class Architect, First-Class Instrumentation Engineer, First-Class Electric Works Execution Manager, etc.
 Administrative First-Grade Official Business Skills in Bookkeeping, First-Class Construction Industry Accountants, etc.

#### Human Resources Active on the Global Stage

As the Group expands business overseas primarily in Asia and the Middle East, Shinryo Corporation has a program that makes a public offering for people who want to work overseas for the purpose of nurturing human resources who can actively participate on the global stage.

After three years of service in an overseas assignment, the person is assigned to a location considering their requests and status of the business.

#### **Training for Mid-career Hires**

Shinryo Corporation is promoting the active participation of diverse human resources. As one aspect of this initiative, we held an education opportunity for all female employees offered both in-person and online in August 2023. This opportunity thoroughly explained Shinryo support programs and various work styles in addition to deepening understanding about one another across generations and occupations to build supportive relationships.





Presentation During the Training

Lecture During the Training

#### **New Employee Training**

#### **Education Programs**

Over the one year of new employee training and education, we have established the perfect curriculum for each technical and administrative system to teach the skills necessary to create an organization where everyone can work with confidence right after assignment.

#### **Education Schedule**

Apr. May Jun. Jul. Aug. Sep. Oct. Nov. Dec. Jan. Feb. Mar.
Primary training and education
Practical on-site training and education (engineering)
Construction drawing training and education (engineering)
Pre-assignment training and education (engineering)
Practical on-site training and education (administrative)
Practical administrative training and education (administrative)
Pre-assignment training and education (administrative)
Education at assigned department
Secondary trainir

and education

#### Primary Training and Education

Primary training and education teach the posture necessary for professionals from the corporate philosophy, policies, and other basic knowledge to business manners over the first month

#### Start of Training at the New Kofu Dormitory

The overall training at Kofu Dormitory for approximately one year is an ongoing tradition at Shinryo Corporation since its founding. Employees who enter the company in the same year can build bonds by living and learning together. This acts as an opportunity to alleviate concerns about the job and seek advice from those with more experience in meetings held by each team at the dormitory.

In April 2023, the Kofu Dormitory moved to Nishitokyo City, Tokyo. New Kofu Dormitory is not only located in a highly convenient location but also addresses issues such as measures to prevent the spread of infections.

#### JOICE

Takeo Kimura



Dormitory Manager Sales Department 3 Tokyo Metropolitan Area Division

Kofu Dormitory is a unique feature of Shinryo Corporation which values the bond between new graduate employees. I think this is a very comfortable environment as the second- and third-year employees at the dormitory support new graduate employees that come from all over Japan. Relationship I have built with the residents of the dormitory as a manager of the dormitory have become a strong network and a great asset for me. I will utilize that strength even after I graduate the Kofu Dormitory to further my growth.

after joining Shinryo Corporation. This program also provides the essential basics for safety management on construction sites as well as on-site operations while interweaving technical experience. In addition, employees learn basic knowledge about Shinryo Corporation businesses through mediums such as courses to teach basic knowledge on construction equipment as well as information related to the main equipment and materials handled on construction sites.

#### Practical Training on Construction Sites

We conduct practical training and education after the primary training and education for not only technical employees but also administrative employees on construction sites. Senior employees are in charge of this practical education and teach a broad range of knowledge, including overall management operations related to safety, quality, and process as well as handling procedures for work drawings and the main equipment. This helps deepen understanding about its business through practical training on construction sites, which are most important to Shinryo Corporation.

Education by Assignment/Secondary Training and Education Shinryo Corporation provides practical education by assignment by dividing engineers and administrators. Engineers take part in training to learn about construction drawings using 3D-CAD software while administrators learn the basic foundation to sales and accounting through hands-on training. These programs also provide an opportunity to review the education conducted over the year and reaffirm the attitude as a professional in secondary training after the initial training is done.

> Kofu Dormitory: Energy saving construction that acquired BELS highest rank  $\star \star \star \star \star$  and ZEH-M Ready.











Communication space



Meeting at the dormitory

Entrance

### Corporate Governance

#### **Corporate Governance System**

The Board of Directors deliberates submitted agenda items based on agenda and reporting criteria stipulated by agenda items and by Board of Directors rules set forth in the Companies Act. The Management Council deliberates on important matters concerning company management, in addition to proposals submitted to the Board of Directors. The Board of Executive Officers communicates reports on the status of work execution by executives and resolutions of the Management Council, and performs prior hearings on opinions concerning matters for deliberation by the Management Council. The Audit Division verifies compliance and the efficacy and efficiency of systems, organizations, and work activities. In addition, it has performed audits of not only domestic and overseas workplaces but also of construction sites.

The Compliance Committee seeks to enforce and improve awareness of legal compliance in conjunction with corporate ethics in collaboration with the Committee and supervisors in each department and Group company, while also conducting policy decision-making and corrective guidance with regard to reports and consultations received through the Shinryo Hotline (@P62) reporting and consultation service.

The Risk Management Committee is also extracting vital technological and contractual risks in large-scale jobs which have the potential to greatly affect management and periodically engages in discussions about measures to respond to these risks.

#### **Corporate Governance System**



#### Internal Control

Since the construction of the internal control system is mandated by the Companies Act, we performed reviews of the system as necessary, and works to fully secure compliance and enhance consistency and efficiency in work execution.

#### Overview of Shinryo Corporation's basic policy on internal control system

- 1. Systems to ensure that the execution of duties of executives and employees of the Group conforms to laws, regulations, and the Articles of Incorporation
- 2. Systems concerning the preservation and management of information pertaining to the execution of duties of directors
- 3. Rules and other systems concerning management of the risk of loss in the Group
- 4. Systems to ensure the efficient execution of duties of directors in the Group
- 5. Systems to ensure reasonable work in the Group composed of our company and Group companies
- 6. Matters concerning the employees in cases of auditors requesting the appointment of employees to assist the duties of auditors
- 7. Systems by which executives and employees of the Group or those that received the report to inform to auditors, and other systems concerning reporting to auditors
- 8. Systems to otherwise ensure the effective conduct of audits by auditors

#### Business Continuity Plan (BCP)

Shinryo Corporation has established a Business Continuity Plan (BCP) to ensure business activities continue during large-scale disasters and other such emergencies. In times of peace, we strive to improve the practicality of the BCP by conducting regular training while pushing forward preliminary measures such as building internal infrastructure and preparing cooperative systems with partner companies. Shinryo Corporation concluded cooperative disaster management agreements with local governments and other such partners to respond to requests for support at the time of natural disasters.

#### Introduction of Comprehensive BCP Drills

Shinryo Corporation regularly conducts BCP drills with the goals of improving employee response capabilities and strengthening the BCP system in the event of a disaster. This training takes a multifaceted approach that includes safety reporting drills for everyone even at Group companies in Japan as well as Disaster Prevention Office training in which the President acts as the Chairperson.

In November 2023, we held a drill for the more frequently occurring wind and water damage caused by typhoons in recent years. We checked the coordination with disasterstricken areas from before the typhoon making landfall to after

its passing as well as procedures of the business recovery system, and reviewed their effectiveness.



Comprehensive BCP Drills

### Business Continuity Plan (BCP) Basic Policies of Shinryo Corporation

- 1. Immediately provide support by prioritizing the safety of executives and employees.
- 2. Sustain ongoing operation of corporate functions by recovering company facilities as soon as possible.
- 3. Cooperate with the recovery of sites currently under construction or completed properties as support toward the business continuity activities of our customers.
- Introduce support to recovering infrastructure and support for residence affected by the disaster as much as possible as a member of the local community.

#### Headquarters Construction Sites On-site Project Manager Headquarter Divisions Disaster Prevention Office Installation Group Administrative Information Gathering Group Sections Rescue Group Headquarters Building Recovery Group Fire Brigade Information Systems Group Stranded Employee Support Group Headquarters Recovery Group Innovation Hub Disaster Prevention Group Innovation Corporate Divisions/Branches Construction Sites **Outside Headquarters** On-site Project Manager Division Disaster Prevention Office Division Chairperson: Heads of Corporate Divisions/ Branches Outside Headquarters Division Secretariat: Secretariat Members Fire Brigade Corporate Division/ Headquarters Branch Employees Japanese Group Companies Construction Sites On-site Project Manager **Disaster Prevention Office**

**Organizational Structure During Disasters** 

#### **Risk Management**

We have prepared systems and measures to minimize damage related to various risks in the business environment surrounding Shinryo Group and ensure business continuity,

#### **Risk Management System**



such as quality, safety, the environment, human rights, compliance, and information, and to continue and recover business as quickly as possible. Shinryo Group has put in place Risk Management Regulations that gather basic risk management items and Crisis Management Measure Regulations. We created specific response guidelines to ensure the ability to rapidly respond to not only risks in Japan and overseas.

In October 2022, we formulated an Overseas Safety and Crisis Management Manual as specific guidelines to respond to crises arising overseas. The purpose of this manual is to prevent risks from materializing by identifying risks and preparing based on their expected impact at normal times using this manual. In addition, we have established a cycle of reviewing risks and impacts every year.

#### Information Security Management Systems

Shinryo Corporation establishes Management Rules of Corporate Information to properly manage customer and partner information. We also regularly carry out security audits of our main businesses and on-site offices. We host internal liaison conferences about information security and emphasize activities to heighten informational literacy. In February 2023, Shinryo Corporation also conducted e-learning on the danger of targeted email attacks and measures against them.

### Compliance

#### Legal Compliance System

#### **Compliance Promotion System**

The Shinryo Group believes uncompromising compliance is the highest priority subject for management. All executives and employees of the Group will practice legal compliance, which is at the heart of the Company Philosophy to "be fair and straightforward" in their actions while striving to gain the support of all of our stakeholders.

#### Shinryo Group Code of Business Conduct

We, the executives and employees of Shinryo Group, have basic and common awareness of corporate ethics and compliance in accordance with Shinryo Group's Company Philosophy and this Code of Business Conduct and Standards of Conduct, and positively practice compliance in our daily business with a strong sense of belonging to the company.

- 1 Pursue customer satisfaction by standing in customers' positions.
- 2 Pursue management efficiency for the sake of shareholders.
- 3 Create energetic and comfortable workplaces that staff can show their families how proud they are of their Company.
- 4 Together with our business partners, thoroughly comply with corporate ethics, laws, and regulations and conduct fair, transparent, and open.
- 5 Constantly pursue how we should be as a member of a healthy society.
- 6 As a global enterprise, contribute to the societal development of related countries.

#### Compliance Promotion System diagram



#### Practical Formulation of Guidelines and Other Rules

#### Domestic Compliance Guidelines

Compliance Guidelines and a Collection of Examples We created the Shinryo Group Compliance Guidelines as core principles founded in our company philosophy, code of business conduct, and standards of conduct. We also established Explanations on Related Laws and Regulations as a manual bringing together systematically organized laws, such as the Antimonopoly Act and Construction Industry Law. Shinryo Corporation and all of the executives and employees of Group companies have taken the guideline education and have committed to compliance.

Shinryo Corporation created a Collection of Compliance Examples bundling specific examples related to compliance as a document to use in education and to raise corporate officer awareness about compliance.

#### **Global Compliance Guidelines**

#### Formulation of Overseas Guidelines

We formulated the Compliance Guidelines (Global Version) for Japanese employees active globally as well as executives and employees of overseas Group companies, etc. We are defining basic mandatory principles in-line with different cultures and customs everyone should adhere to based on compliance with each type of international rule which includes compliance to the laws and regulations in each country and region as well as human rights. All managers undergo education for these guidelines and vow to adhere to this compliance.

#### Thorough Compliance to Guidelines for Anti-corruption Overseas

Shinryo Corporation gathers compliance items and the compliance system related to government officials when conducting business overseas in its Guidelines for Anticorruption Overseas. These guidelines include countermeasures tailored to the circumstances of each country and region in addition to basic principles as well as anticorruption concepts common to each country. We respond to changes both statutory and political in a timely manner while continually making revisions. Furthermore, we continuously conduct guideline training for all Japanese employees who work at overseas bases as well as executives and employees from local companies.

Shinryo Group Basic Principles on Anti-corruption Overseas

- 1. We will not pursue the acquisition, expansion or profit in business through bribery or any other inappropriate means.
- We will comply with bribery and anti-corruption laws and regulations in each country and region while adhering to Article 18 of the Unfair Competition Prevention Act in Japan (prohibition of illicit profits to foreign public officials).
- 3. We will never give gifts with the intention of acquiring business or gaining favor even if such practices are customary in the country or region.



#### **Understanding and Practice of Compliance**

KPI	
	_

Participation rate in compliance training (Target: 100%)

### Implementation of Comprehensive Compliance Education

#### Implementation of education for every executive and employee throughout the Group

Implementation of education for every executive and employee throughout the Group Compliance education is regularly held for Shinryo Corporation and Group companies worldwide. In fiscal 2023, we conducted practical education on compliance violations and harassment that could occur in construction sites. By handling social issues in a broad and timely manner, Shinryo Corporation strives to build a corporate climate engaged in operations while always keeping in mind compliance.

Target Trainees	Training Content
Engineers	Compliance violations that could occur in construction sites
New employees	Explanation on Compliance Guidelines
New mid-level employees	Explanation on Compliance Guidelines
Employees in each department	Various compliance violations likely to occur in business

#### Periodic Distribution of Shinryo Compliance News

Shinryo Compliance News is distributed periodically by email to all of our executives and employees. The news covers a broad range of topics from legal explanations about the Construction Industry Law and other statutory regulations relevant to Shinryo Group businesses, and points on legal amendments to compliance in the workplace. Each issue also provides a system to easily offer feedback and make inquiries about compliance

#### **Responding to Antisocial Forces**

We will work to stay faithful to our Code of Business Conduct and Standards of Conduct stating our intention to never

### Human rights

We hope to fulfill our responsibility of respecting the human rights of all our stakeholders involved in our business activities based on our Management Vision of "Create a Freshening World."

We have established human rights policy in November 2023. In addition to supporting and respecting international guidelines such as the International Bill of Human rights and through a questionnaire.

#### Launch of an Internal Reporting System

Shinryo Corporation has established its Compliance Reporting and Consultation Regulations with the objective of preventing legal violations or inappropriateness as well as quickly discovering and correcting signs of these issues. Pursuant to the Whistleblower Protection Act, we have set up and are running an internal reporting system that places emphasis on the protection of whistleblowers. The SHINRYO Hotline has also been set up as a reporting and consultation service in an effort to raise awareness.

SHINRYO Hotline Reporting and Consultation Service	
Internal Service Office: Shinryo Corporation/Compliance	
Promotion Division	
E-mail: soudan@shinryo.com	
External Service Office: Wakaba Partners Law and Accounting	
Firm	
E-mail: soudan@wakaba-ps.jp	
This service is available to anyone whether a Shinryo Group	
executive and employee or not. *Please see the Shinryo	
Corporation website for more information.	
https://www.shinryo.com/corp/compliance.html	

#### **Cooperation Between Group Companies**

We regularly hold liaison meetings with Group companies in Japan and share information about compliance such as response to legal reforms and formulation of internal rules to unify compliance awareness and operations as the Shinryo Group. In the liaison meetings held in fiscal 2023, compliance incidents of each company were reported and information on education and materials for improving compliance were shared.

succumb to the threats of antisocial forces and resolutely eliminate them in a courageous manner.

UN Guiding Principles on Business and Human rights, we will engage in business activities in accordance with the four areas and ten principles, including human rights, of the United Nations Global Compact. We will also promote business partners and partner companies to respect human rights and work to respect human rights in the entire supply chain.

Initiatives	Description
Training and awareness- raising activities	<ul> <li>Implementation of e-learning and training on harassment, distribution of the Shinryo Compliance News via email, and other informational dissemination @P62</li> </ul>
Preparation of a working environment	<ul> <li>Work-style reform initiatives: promotion of the Refreshing Work Style Project and Challenge 45 ØP53, 54</li> <li>Promotion of health management ØP55</li> <li>Encouragement of the active participation of diverse human resources ØP56</li> </ul>
Cooperation with partner companies	<ul> <li>Health and safety activities on construction sites through the Health and Safety Council <i>P</i>51</li> <li>Promotion of a supply chain with human rights considerations according to the Shinryo CSR Procurement Guidelines and Declaration of Partnership Building <i>P</i>52</li> </ul>
Setup of a consultation service	• Setup of the Shinryo Group Hotline reporting and consultation service and protection of whistleblowers 🥔 P62

### Sustainability Promotion Activities at Shinryo Group Companies

### Each company of the Shinryo Group is aiding in the growth of society from initiatives to solve social issues through its businesses.

#### Shinryo Technical Service Corporation

#### Implementation of Energy Saving Tuning

As a company that offers construction equipment renewals and maintenance and management services, Shinryo Technical Service uses the utmost care in making proposals toward long-term comfort during building use. In renovation construction, the company not only offers highly efficient equipment proposals but also energy saving tuning to further increase the energy saving effect of equipment. The aim is to further reduce energy consumption of equipment by adjusting the temperature of the cooling water, pressure of the water sent to air conditioner, and other settings to make full use of the equipment's performance. The company hopes to contribute to the decarbonization of customers' equipment through this service.

#### Shiroguchi Co., Ltd.

#### **Improving Efficiency of Drain Pipe Tests**

For testing drain pipes in buildings, cloths and balls are flushed down toilets and sanitary equipment after the construction is completed to test for clogs in pipes and where waste water flows to. Conventionally, flushed cloths were collected from catch basins outside the building and each sanitary equipment required to be tested individually with multiple personnel located in different locations of the building. As such, it required large amount of water and time. To address these issues, the company developed a testing tool that enables collection of cloths from cleaning holes. This enabled the reduction of water used for testing water passage and improvement of efficiency.



Confirmation of energy saving tuning



### Improving Productivity in Plants with Environmental Maintenance

The manufacturing plant with a lot area of 16,530m<sup>2</sup> located in Hiratsuka City, Kanagawa Prefecture manufactures and maintains pumps for public infrastructure and industrial environmental equipment as well as trial operation of large pumps as the Shinryo Cooperation's manufacturing base. Renovations such as renewal of plant facilities and relocation of processing machines were conducted from 2017, with the completion of the renovation of the office building in 2023 finishing the improvements of its workplace environment. The company implements automation of manufacturing equipment, online visit inspection, and 3D technology to improve the productivity of the entire plant.



Exterior of Hiratsuka Plant No. 1



Testing water passage in pipes with testing tool

Internal of Hiratsuka Plant No. 2

#### THAI SHINRYO LTD.

#### Implementation of Regular Technical Education

THAI SHINRYO continuously holds monthly technical education to improve the skills of technical employees. Themes of education are chosen from diverse fields such as design calculation, construction quality, material selection, management methods for construction sites, and safety management, with a focus on request from young employees and questions that arose during daily work. Education is offered through lectures which can be participated in-person and online as well as through external lectures such as plant visits

with the cooperation of partner companies. The company aims to educate its employees while also creating a comfortable workplace through technical education.



External lecture on pipe welding

#### SHINRYO (PHILIPPINES) CO., INC.

#### **Operation of Safe and Secure Construction Sites**

The company received the Distinguished Service Award for achieving zero accidents and disasters in construction sites and Safety Record Award for appropriate submission of records on crisis management and initial disaster response drill from the SAFETY ORGANIZATION OF THE PHILIPPINES INC. at the 14th National Construction Safety Conference. SHINRYO PHILIPPINES has been cooperating with partner companies to conduct safety education and safety patrols and maintain high level of safety management that incorporate Japanese

management method in order to realize safe and secure construction sites. The company regards this recognition as an encouragement to continue working toward realizing safe and secure operation of construction sites.



Awarding at the National Construction Safety Conference

#### Daiei Denki Co., Ltd.

### Contributing to Decarbonization Through Photovoltaic Generation System Business

The company has been making advancements in the "in-house consumption type photovoltaic generation system business" by utilizing technological capability and knowhow cultivated through constructing photovoltaic generation equipment since 2009. The business enables customers to purchase the generated electricity from solar panels installed by power generation companies in the customer premises. Daiei Denki simulates the amount of power generation and consumption to offer equipment that enable an efficient cycle of electric consumption. The company hopes to contribute to decarbonization through customers, power generation companies, and Daiei Denki working together to create an environment which renewable energy is easy to use.

#### Global Staff Co., Ltd.

#### **Comprehensive Construction Site Support Through ICT Technology**

Through the merger of a Group company that engage in drawing blueprints and BIM related businesses, the company has built a system that can offer outsourcing work related to ICT and BIM in addition to dispatching human resources. The company offers wide range of services that supports construction sites from outside including administrative work such as organizing photo data and creating minutes for the meeting, creating blueprints and 3D models with BIM, and engineering work such as static pressure and lifting height calculations. Going forward, the company will coordinate construction sites and DX to create a system that can provide support from anywhere in Japan through using ICT technology.



Photovoltaic generation system



Preparation for storing photo data to construction management app

#### Akita Castle Hotel Co., Ltd.

#### **Contributions Toward Local Health and Welfare**

Medical catering business, which require provision of meals that match health conditions, supports human life with food using high level of expertise and food processing technology. Since the start of its business in 2001, the company now offers its services to 40 locations in the prefecture, such as hospitals and welfare facilities. The service not only considers taste but also ease of eating and color by offering locally unique menus and special menus by hotel chefs, capitalizing on being a local hotel. Soft foods using mousse from foods are shaped to look real to enable people that have trouble swallowing to enjoy eating.



Soft food made to look like real sushi



Ingredients processed into mousse

#### **PT.SHINRYO INDONESIA**

#### **Initiatives to Strengthen Information Security**

The company conducted information security education for the purpose of raising awareness of the Information Security Guideline. All national staff participated in the education and confirmed items to be aware of when connected to the Internet and using the internal system, how to use external devices, and measure to take when infected by a virus. This was a good opportunity to remind everyone that consciously making improvements to the workplace environment on a daily bases lead to prevention of troubles. The company will

continue to maintain the relationship of trust with customers and business partners through continuing to educate the employees and appropriately managing information.



Online information security education

#### SHINRYO TECHNICAL SERVICES LTD.

#### Contributing to Traffic Infrastructure in Hong Kong

As a company specializing in renewal construction of construction equipment and maintenance and management services, the company handles maintenance and renewal construction of air conditioning systems in buildings as well as various traffic infrastructure equipment in Chinese highspeed railways, subways, and airports. Of note, the company is handling the renewal constructions of chillers in stations and piping in tunnels of subways in the Hong Kong Island and Kowloon Peninsula sides based on meticulous process

management following the annual plan. The company will contribute to make the important traffic infrastructure of Hong Kong safe and comfortable for the citizens.



Ventilation fan in the subway tunnel

### Social Engagement

Shinryo Corporation actively conducts activities to demonstrate the importance of community and culture as a company that contributes to the development of sustainable society. We also believe that steadily accumulating small, close-at-hand activities is important in engaging with local communities.

#### **Initiatives to Support Education**

Shinryo Corporation is focusing on supporting activities aimed to better young generation's understanding of the construction industry and engineering technology to raise their interest.

#### Supporting High School Internships

In July 2023, we brought in 10th grade living environment system interns from Fujisawa Koka High School. The training spanned three days, offering curriculum including hands-on training of creating design plan that meets customer request, a tour to heat source system at a renovation construction site, and a tour to a duct manufacturing plant of a partner company to deepen their understanding that the construction industry is

founded on support from many people.



Heat source machine room tour

#### Part-time Instructor Activities at Universities

Employees of Shinryo Corporation are jumping at the chance to teach as part-time instructors at universities in courses that include classes related to building services and engineering systems. To develop the construction industry and its technology, we hope to stay actively involved in the educational opportunities of students entrusted with the next generation.

#### Course track-record

Name of University	Classes taught
Meijo University	Construction Equipment Engineering 2
Tsukuba University of Technology	Specialized Courses in Eco Environmental Systems and System Engineering
Tokyo University of Science	Advanced Ventilation Systems
Setsunan University	Studies on Building Services
Osaka Metropolitan University	Studies on Building Services

#### **Social Contribution Activities**

Shinryo Corporation strives to realize a rich and fulfilling society based on its management vision "Create a Freshening World."

#### Donations to the Disaster and Humanitarian Organizations

Considering natural disasters becoming more devastating in recent years and disaster-afflicted areas needing longer-term support, Shinryo Corporation continues to donate funding of ten million yen every year to organizations in Japan and overseas that actively support the recovery.

In fiscal 2023, we donated five million yen to the Japan Voluntary Organizations Active in Disaster (JVOAD), an organization that builds system for activities to support disaster-affected area during disaster as well as during normal times. We have also donated three million yen to the United Nations High Commissioner for Refugees (UNHCR), an international organization that protects and supports refugees and displaced people, and a total of two million yen to the Turkish Embassy In Tokyo and the Japanese Red Cross Society as donations to support the recovery from the earthquake in the south-eastern part of Turkey.

#### The Plus Volunteer Activity

Our corporate divisions and branches in Japan take part in the Plus Volunteer Activity. The Plus Volunteer Activity aims to add (plus) clean-up and other volunteer activities to events such as gatherings with employees, families and partner companies held at each department. It was temporarily suspended due to COVID-19, but we are

gradually becoming more active. Also our overseas local companies also continually take part in volunteer activities deeply rooted in local communities.



Carry out clean-up volunteer and beachcombing (Yokohama branch)

#### Support for Culture and the Arts

Shinryo Corporation promotes activities to support the development of superb and vibrant arts and culture.

#### We support the following organizations:

NHK Symphony Orchestra, Tokyo/Kanagawa Philharmonic Orchestra/Kansai Philharmonic Orchestra/The Kyushu Symphony Orchestra/Sapporo Symphony Orchestra/New National Theatre, Tokyo/New Japan Philharmonic/Sendai Philharmonic Orchestra/ Tokyo Metropolitan Symphony Orchestra/Tokyo Nikikai Opera Foundation/The Japan Opera Foundation/Japan Performing Arts Foundation/Hiroshima Symphony Orchestra/Yomiuri Nippon Symphony Orchestra

### **Third-party Opinion**

Hidemi Tomita, Managing Director of LRQA Sustainability KK who has given his insight into our selection process for priority subjects and other efforts in the past, joins us again to give his third-party perspective.



Hidemi Tomita LRQA Sustainability K.K. Managing Director

Mr. Hidemi Tomita cultivated experience in CSR management at a business firm before joining Lloyd's Register Japan K.K. in 2013. In 2020, he was appointed the Managing Director of LRQA Sustainability K.K. (Previously Lloyd's Register Japan K.K.). Mr. Hidemi Tomita has also been involved in numerous other roles during his career, including his service on government committees and involvement with international standards.

The SHINRYO Report 2024 once again brings together information from Shinryo Group profile and business overview to the corporate history in a very accessible manner. The report is easy to read with the sustainability initiatives and other detailed information required to understand the overall picture of the company being organized systematically. I feel that the report is concisely summarized and reflects the elements of an integrated report, excluding financial information.

In terms of "Feature 1: Construction Process Innovation with DX," I believe it is a very effective method for addressing various upcoming issues such as decline of the labor force. This initiative is put to practice in the construction of the Innovation Hub, which I feel it showcases the Company's strength.

As discussed in "Feature 2: Construction of New Main Building of Shinryo Innovation Hub," the hub can become a symbol of the Company as a research site and a proof of concept for decarbonization. I am excited to see what kind of technology will be developed there in the future.

These are good examples to showcase the innovativeness of the Company that aims to be a "Future & Environmental Engineering Company."

As for the promotion of sustainability, as I noted last year, the report continues to clearly presents the promotion system alongside the four priority subjects (materiality) while demonstrating uniqueness of Shinryo Corporation. This year, the Company has established its human rights policy and endorsed TCFD, along with its related initiatives. I think these were appropriate response to the rapidly shifting external environment.

Going forward, I expect the Company to make advancements in initiatives addressing sustainability of the Company, such as implementation of human rights due diligence, as stipulated in the human rights policy, and its disclosure; disclosure based on the TCFD framework and setting reduction target for Scope 3 emissions; revision of procurement guidelines aimed at managing the impact in the entire supply chain; and other initiatives.

In 2023, TNFD Recommendations were released following the TCFD, indicating the progress in the formulation of an international standard for disclosure of information on sustainability. As Shinryo Corporation is not a listed company, it may not necessarily be required to respond to all these things, but I hope the Company continues to keeping track of new trends as they are information required by customer companies.

When looking at points I addressed in the previous year, disclosure of KPI results has changed from a single year in the previous year to show a three-year progress, which clearly showcase the progress made toward the target. Considering its volume, SHINRYO Report has a great characteristic of providing very detailed explanation. For example, initiatives and results of Scope 3 are provided for each category in "Priority Subject 1 Contribute to a Decarbonized Society." In particular, technologies used in the Shinryo Shinjo Building are highly praised for their environmental performance, and even in overseas, strongly highlighting the connection between business and sustainability.

Furthermore, "Priority Subject 4 Build Refreshing Environments Rich with Creativity" not only provides examination rate of health checkups and stress checks, but also ratio of employees that are able to sleep for six hours or more. Data such as these are rarely disclosed even by major listed companies. Such stance toward disclosure is not just for formality and sends a message about the direction the Company is headed. I hope Shinryo Corporation to continue focusing on aspects unique to the Company while also addressing various standards for information disclosure.

#### **Reflection on the Third-party Opinion**

#### Koichi Kaji

Director, Managing Executive Officer in charge of Sustainability Promotion

I would like to thank Hidemi Tomita for his invaluable feedback about our sustainability promotion activities. Formulation of the human rights policy and endorsement of the TCFD Recommendations was carried out in 2023 upon systemically reorganizing the past initiatives. As highlighted in the comment, we recognize that making steady progress is important. In terms of human rights, we are revising the CSR Procurement Guidelines to promote human rights due diligence in the entire supply chain. In terms of TCFD, we are further accelerating the reduction of Scope 1 and 2 emissions with the completion of the Innovation Hub as well as making progress in discussions for setting Scope 3 reduction targets. For information disclosure, we are considering the disclosure of information focusing on climate change and resource recycling that align with international standards. Shinryo Corporation will continue striving to contribute to the development of a sustainability society through our business activities.

SHINRYO CORPORATION

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