

Shinryo
Corporation
CSR Report
2016



# Becoming an Environmental Engineering Company Contributing to the Sustainable Growth of Society

Shinryo Corporation and Shinryo Group are promoting CSR activities to contribute to the sustainable growth of society through sincere execution of business activities considering the needs of society and mankind for the well being of the environment.

#### Takeshi Kagami

President, Representative Director Shinryo Corporation

#### Approaching Our 60th Anniversary

Masaru Kagami, founder of Shinryo Corporation, founded this business with a dream that he spoke of at the time of establishment, as a company able to be run by earnest engineers. He put all his love and ambition for engineering into this company. Shinryo Corporation began with this belief. We celebrated our 60th anniversary thanks to the work of our employees brought together to support our customers and carry forward the spirit of our founder. I would like to share my deepest gratitude to all of our stakeholders.

We will continue to strive to be pioneers with in the sprit of our founder, both now and into the future, without ever taking our 60-year history for granted. Moreover, each and every person has given their utmost faith to pursuing our founding principles. This approach has earned the trust of our customers and I believe the ideal of our employees is determined by the value of Shinryo Corporation. In this report, we look back to share the 60-year history of Shinryo Corporation.

The 60th anniversary is an opportunity for us to reorganize the "Create a Freshening World" management vision of Shinryo Corporation. "Create a Freshening World" is our belief as a company and a message to all of our stakeholders. To make this message even easier to understand, we have brought together our ideals as the brand promise of Shinryo Corporation. I hope everyone will be able to gain a greater understanding of Shinryo Corporation through this brand promise.

#### Continual Growth through the Challenge of Creation

This fiscal year furthered the measures of the 13th Three Year Plan (62nd-64th Term: October 2016 to September 2019) medium term plan. There are many challenges surrounding Shinryo Corporation today. This includes the future slowdown and shrinking trend in the Japanese construction market, responding to a lack of human resources in the construction industry, and the fierce competition in overseas businesses. Amid this situation, the 13th Three Year Plan forecasts growth of Shinryo Group over the next ten years, and outlines initiatives to confront these challenges head on.

The objectives we are aiming to achieve specifically in this three year vision defines an environment and vision that an engineering company with continual growth can achieve through the challenge of creation. The realization of this vision is found after overcoming our challenges. Therefore, the need "to challenge" is important. We are aiming to realize our vision through this challenge.

Work style reform which will be described later, is one measure we are engaged to realize our 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.

We will continue to strive to maintain an enthusiastic and productive workplace for diverse human resources.

#### Energy Saving Eco-project in Headquarters Building

We have been engaged in Shinryo Corporation Energy Saving Eco-project in our Headquarters Building (FY2012-2016) to renovate the headquarters building (Shinjuku-ku, Tokyo) built in 1970 into an energy saving building. The energy saving eco-project strives for ecological reform by using various energy saving technology seeking to achieve energy reduction targets of 40% energy savings, 50% in air conditioning and ventilation, 40% in the building overall, and a 37% reduction target for CO2 emissions (compared to levels in FY2009).

As a result of continuous energy saving measures and improvement in operations, we have been able to reach our targets one year earlier than planned with operation starting in the fourth year after the revision. The effort put towards energy savings is an effort furthering our environmental contribution. We provide an overview and report our results of the project in Feature 1.

#### Environment, Quality, Health and Safety Initiatives

This year's report includes detailed activities for environmental initiatives (ISO14001 Environmental Management System) and quality initiatives (ISO9001 Quality Management System). Since acquiring the Environmental Management System certification in 2001, we are continuing basic environmentallyfriendly activities including reducing the amount of CO2 emissions and engaging in asbestos measures to appropriately process industrial waste and recycle of fluorocarbons.

We are also publishing information about on-site health and safety, which have been a primary focus since the founding of Shinryo Corporation.

This report also provides information about Group-wide initiatives to prevent labor accidents according to Shinryo Corporation "No Work Without Safety No Company Without Safety" basic health and safety policy.

#### First Step Toward Work Style Reform

The ideal work style reform for Shinryo Corporation aim to correct long working hours and realize a work-life balance. In this fiscal year, we have begun its work style reform to realize this ideal. We have appointed an executive in charge of work style reform in April 2016 and first started implementing "no overtime days" policy. We are promoting the effort to return home without working overtime, once a week by selecting a construction site the promotion model case for no overtime days. This will extend not only at our offices but all of our sites. I believe a transformation in the awareness of executives and general managers about work styles is necessary, and we are holding classes conducted by external lecturers.

In addition, we have put together and are implementing various initiatives such as a system to support the physical and mental health of employees and promotion of diversity to work style reform.

#### To All of Our Stakeholders

Shinryo Corporation has declared it's participation in the United Nations Global Compact in FY2014. In exercising Social Responsibilities on the international stage, we will promote CSR activities in relation to the Ten Principles of the United Nations Global Compact in respect to human rights, treatment of labor, environment considerations and the prevention of corruption. As an environmentally focused engineering company, we will continue contributing to the conservation of the global environment and sustainable development of society through the earning of trust from the international community through our openness and sincerity, and by voluntarily and actively responding to the ever changing demands of society.

The CSR activities of Shinryo Corporation as it celebrates its 60th anniversary are not only to fulfill our social responsibilities but also to link medium-term plans. We are also promoting activities to further the values of our organization.

We will continue to work to reflect the feedback we receive from everyone in our businesses. In this respect I ask for your ongoing support and guidance to continue in the future.

#### OParticipation in the United Nations Global Compact

In September 2014, Shinryo Corporation signed as a participant in the United Nations Global Compact set by the United Nations. Shinryo Corporation will promote business following the Ten Principles in four areas in the United Nations Global Compact.

For Shinryo Corporation that make effort in providing technologies overseas, participation in the United Nations Global Compact is not just agreeing with the cause but participating in the International Global Compact is an expression of wanting to grow into a company trusted by the international community. Our desire is to make our management vison of "Create a Freshening World" to activities that are directed toward the world.



#### The Ten Principles of the UN Global Compact

<ul><li>Human Rights</li></ul>	Principle 1 Principle 2	Businesses should support and respect the protection of internationally proclaimed human rights; and make sure that they are not complicit in human rights abuses.
• Labour	Principle 3 Principle 4 Principle 5 Principle 6	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining; the elimination of all forms of forced and compulsory labour; the effective abolition of child labour; and the elimination of discrimination in respect of employment and occupation.
<ul><li>Environment</li></ul>	Principle 7 Principle 8 Principle 9	Businesses should support a precautionary approach to environmental challenges; undertake initiatives to promote greater environmental responsibility; and encourage the development and diffusion of environmentally friendly technologies.
<ul><li>Anti-Corruption</li></ul>	Principle 10	Businesses should work against corruption in all its forms, including extortion and bribery.

#### **Participation in the GCNJ Environmental Management Conference**

We are participating in the Environmental Management Conference of the GCNJ\*, which is a local United Nations Global Compact network. This conference provides resources such as classes by experts and introductions of environmental management examples from participating companies related to the challenges directly faced in corporate business activities. We are learning the latest information and knowledge through this conference to expand activities of Shinryo Corporation to environmental management.

\*Global Compact Network Japan

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#### **Editorial policy**

The intent of this report is to enable all our stakeholders to deepen the understanding of Shinryo Corporations CSR (corporate social responsibility) activities.

#### OTarget period

Centering on FY2016 (October 1, 2015 to September 30, 2016), including some periods before and after.

#### Scope of report

CSR activities of Shinryo Corporation and Shinryo Group companies are reported.

#### ○Reference

- •ISO26000
- •GRI (Global Reporting Initiative) Sustainability Reporting Guideline 4th Edition (G4)

#### OPublication date

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#### ODivision responsible for publication and contact point

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# 60 Years of Shinryo Corporation Aiming to

# Create a Freshening World

Shinryo Corporation will celebrate its 60th anniversary since its founding in 1956. This section introduces milestones throughout those 60 years as well as our history with efforts in human resource development and in technology which was cultivated toward our management vision "Create a Freshening World".

#### 1956-1968

#### **Founding and Rapid Evolution**

- 1956 Established our headquarters at 45 Shibanishikubo Tomoecho, Minato-ku, Tokyo and founded our company with 5 million ven in capital
  - Received first order for cooling equipment work from Kaori cafe and restaurant
- 1957 Received an order for Shin-Otemachi Building, one of the largest building in Japan at that time. Established the foundation of our company
  - Received an order for equipment construction in the full plant operation at Fuji Tsushinki Manufacturing Kawasaki plant
- 1958 Opened the Osaka Office
- 1960 Moved our Headquarters to its current location (2-4 Yotsuya, Shinjuku-ku, Tokyo)

- 1961 Opened the Nagoya Office
- 1964 Established the Construction Division and **Equipment Division**
- 1965 Developed Japan's first "3-pipe Air-conditioning System" and installed it in head office of Nippon Fudosan Bank
- 1966 Opened the Hiroshima Office
  - Completed construction of Training dormitory "Kofu Dormitory
- 1967 Opened the Sendai Office
- 1968 Deployed three engineers for American inspections
  - Introduced skyscraper building application/ refrigerator computer control at the World Trade Center Building



Shin-Otemachi building

#### Belief of our Founde

#### OHistory Cultivating Technology and People



nitial Meeting to Establish Shinryo Corporation



The First Members training at the Takamatsu Dormitory



#### Company Philosophy

This company philosophy expresses the life philosophy and business philosophy which was the belief of our founder, Chairperson Masaru Kagami (deceased).

Shinryo Corporation was established in order to embody this philosophy in the business world. These three principles serve as the roots of Shinryo Corporation, and they are the foundation for all thinking, decision-making and action of executives and employees

#### 1969-1977

#### Strengthening of the Division Organization System and Expansion to New Business Domains

- 1969 Opened the Fukuoka Office 1972 Received the first order for
- 1970 Completed the new headquarters building
  - Established the industry's first research center for air conditioning technology
  - Opened the Nuclear Power Plant Department, and entered the field of energy
- 1971 Opened the Chugoku Branch
- 1972 Received the first order for full-fledged overseas work at the Vietnam Cho Ray Hospital



Cho-Ray Hospital (Vietnam)

- district heating and cooling systems at the Senri New Town Chuo District Center
  - Received an order for district heating and cooling systems from the Shinjuku Fukutoshin District
- Opened the Sapporo Office plant for nuclear power use 1973 • Opened the Tokyo Metropolitan Area Facilities Department and established a system for handling large-scale projects such as urban planning and urban redevelopment
  - 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 an order for the initial construction of the Kwun Tong Hong Kong Subway Line



Senri New Town Chuo District Center (District Heating and Cooling Systems)



Shinjuku Fukutoshin District (District Heating and Cooling Systems)

#### **OHistory Cultivating Technology and People**



1969 Strengthened the organization of eight corporate divisions. Each division took responsibility, which was for the purpose of teaching young



Completed the new headquarters building in Yotsuya, Shinjuku-ku. This accelerated our independence as an organization.



1970 Established the industry's first research center (Osaki, Shinagawa-ku, Tokyo)

#### 1978-1<u>98</u>7

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

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



Tokyo Dome



The Hong Kong and Shanghai Banking Corporation Limited, HSBC Main Building (Hong

#### 1988-1997

#### **New Mission and** Restructuring of **Core Businesses**

- 1990 Opened a Research and Development Center in Tsukuba Academic Town
  - Established a local company (SHINRYO (PHILIPPINES) COMPANY, INC.) in the Philippines
  - Received order from The Landmark Tower Yokohama
- 1992 Opened the Technical Supervision Department and Safety Supervision Department
  - Passing of Founder and Chairperson Masaru Kagami
- 1994 Established a local company (PT. SHINRYO INDONESIA) in Indonesia
- 1995 Received an order for the first overseas district cooling system plant at Kuala Lumpur International Airport



THE LANDMARK TOWER YOKOHAMA

#### OHistory Cultivating Technology and People



1990 Opening of the Research and Development



1992 Passing of Founder and Chairperson Masaru Kagami

#### 1998-Present

#### Challenge for Business Expansion and System Maintenance

- 1998 Acquired ISO 9000s certification
  - Began development of numerical fluid analysis technology using super computers
  - Received order from Okinawa Churaumi Aquarium
- 2001 Acquired ISO 14001 certification
  - Established a local company (SHINRYO SINGAPORE PTE LTD.) in Singapore
  - Received orders for district heating and cooling system plant in Marunouchi District
- 2002 Received order for Sharp Corporation Kameyama Factory
- 2003 Released 3D-CAD "S-CAD" working drawing CAD for construction equipment
- 2005 Opened Middle East (Dubai) Branch
- 2007 Established a local company (SHINRYO VIETNAM CORPORATION) in Vietnam
  - Opened the Abu Dhabi

- 2008 Registered the Research and Development Center as a Certified Environmental Survey and Odor Measurement Services
- 2009 Renovated headquarters building (Energy Saving Eco-project in headquarters building)
- 2010 Established the Control & Instrument Engineering Division
- 2012 Commemorated for longtime certification of environmental management system
  - Opened the Working **Drawing Center**
  - Developed the Space Scanning System using 3D technology
- 2014 Opened the CSR Promotion Division and Compliance Promotion Division
  - Introduced the overseas practical dispatch system and overseas short term training system for new employees
- 2015 Began on-site training for engineers from overseas



Sharp Corporation Kameyama Factory



The Venetian Macao Resort (Macau)



Petronas Penapisan (Melaka) Sdn Bhd Cogeneration Plant (Malaysia)

#### **OHistory Cultivating Technology and People**



2006 Moved Kofu Dormitory to Yokohama







Utilized as a facility to conduct all education in addition to new employee

# 1

# Energy Saving Eco-project in Headquarters Building

Shinryo Corporation has brought together technologies and know-how cultivated over the years to renovate its headquarters building completed in 1970 into a structure with both energy savings and comfort. We have continually improved operations even after renovation and achieved the energy saving target one year ahead of the plan.

#### **Social Demand**

The major trend in Japan has been scrap and build, which rebuild buildings in short term. This approach has large environmental load as large amount of waste is generated when rebuilding. As such, demand of long-term use through

properly renovating of the building is high. In addition, reducing energy consumption for operating the building to realize low carbon society is in demand.

#### Overview -

Over 40 years has passed since the construction of headquarters building and equipment has aged and had low energy efficiency. In addition, the comfort level during the CoolBiz efforts in the summer season had worsened with insufficient dehumidification and temperature irregularity. Furthermore, the amount of energy consumption could not be seen numerically and many aspects for increasing

energy saving awareness in employees working at the headquarters building were problems. In response, this project aimed to realize both energy saving and comfort through implementing air conditioning system that improve energy efficiency and comfort and configuring software that promote employees working in the headquarters building to conduct energy saving and be aware of comfortability.

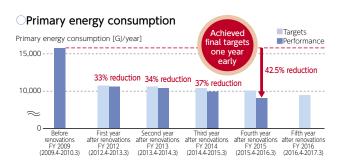
#### **Achievements**

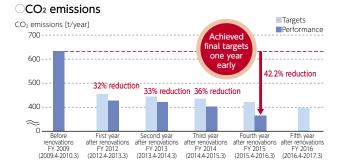
# Achieved a target reduction rate one year earlier than planned

Energy savings / Comfort

Hardware / Software

Our first plan aimed to achieve a 40% reduction rate in our primary energy consumption and 37% reduction of CO<sub>2</sub> emissions (compared to FY2009 levels) by FY2016,





fifth year of renovation. However, we were able to achieve these targets and begin operation in our fourth year, one year ahead of the plan, as a result of continual efforts to improve operations.

# Succeeded in both energy savings and comfort



In a survey of employees working in the headquarters building, 70% said the workplace was more comfortable than before the renovations. These upgrades were able to provide both energy savings and comfort. We also improved efficient use of space by using a non-territorial office in some areas. In addition, this increased productivity by adopting mobile extensions to cellular phones to eliminate wasteful operations such as answering phones when someone is away from their desk.







Workplace after renovations

## Main Technology Implemented

#### Heat Source Systems Packing Using Natural **Energy and Highly Efficient equipment**



We planned the heat source system considering effective use of natural energy and adopting highly efficient, equipment. We are implementing solar cooling systems as equipment to effectively use natural energy to use solar heat energy for heating and cooling. This is a system to create hot water using solar hot water panels. In the summer, hot water is supplied to the solar heat recovery chilled / hot water(gene-link) systems to generate cold water for cooling. In the winter, the hot water is used for heating through a heat exchanger for heating. In addition, we are using the waste heat of the cogeneration system together with the solar heat.

#### Solar hot water panels

Collects solar heat to generate hot water at roughly 65°C to 85°C.



#### Solar Gene-link

Uses hot water produced from thermal heat in the summer to generate cold water. Used for cooling

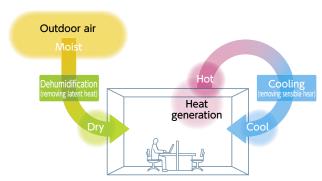
#### Heat exchanger for heating

Uses hot water generated by solar heat in the winter to generate hot water. Used for heating

#### Dehumidification and cooling separate air-conditioning system



The dynamic ice storage system - "The Jiyu Sekkei" developed by Shinryo Corporation is used to dehumidify outdoor air realizing comfortable working environment.



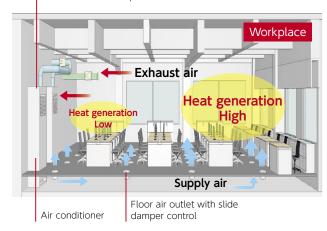
Overview of dehumidification and cooling separate air conditioning system

#### Air conditioning system able to control each zone independently



We implemented an air conditioning system to control the amount of air volume according to the heat load of each zone. We are reducing the power for convoy one of heat by controlling the variations in air volume. We also eliminated temperature variations in workspace which occurred due to the single duct system before the renovations with the control of each zone.

variable air volume system



#### Operational management system to support comfort and energy saving



We developed Smart Eco Office Controller (SEOC) system that is able to operate with fine precision to the intent of the employees. Employees can inform whether it is too hot or cold from their own computer. For example, if an employee indicates they are "cool" or "very cool", the temperature set for the air conditioner is lowered and run for a set period

of time (10 to 20 minutes). We are also visualized the amount of energy used in each zone as an awareness measure toward energy savings in our employees. This has been effective in promoting better awareness of energy savings by comparing zones with other zones.



Computer and tablet screen

#### High efficiency lighting system



We use LEDs and other High efficiency lighting systems. We effectively use daylight and control brightness per zone using lighting sensor to reduce the use of electricity for lighting. In addition, lighting is automatically turned off after gradual lighting adjustment using human sensor to realize energy saving.

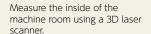
#### Initiatives in Installation

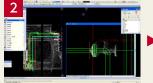
# Labor Saving in Installation Through 3D Measurement Technology



We prefabricated some parts of the new installation piping by using 3D laser scanner and the 3D-MAPS system to 3D measuring and positioning system.







Revise the working drawings by comparing the 3D coordinate data and the working drawings (3D-CAD) created from blueprints.



Produce the new installation piping according to the working drawings at the plant. Attach RFID tags\* to all parts that are produced.

\*RFID tag: tag can be that reads and written information without direct contact.



Automatically identify the position to install those parts from the working drawing by reading the RFID tags. Install the parts based on the position indicated by 3D-MAPS.

\*Illustration of laser beam on the photograph.

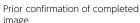
# More Efficient Operations Through the Use of BIM



Shinryo Corporation uses the 3D-CAD "S-CAD" software it developed independently to create designs, working drawings, and 3D models, and then built a Building Information Modeling (BIM) model. This allows us to check a completed image in advance and eliminate any rework after the installation.

In addition, we created animations from the vehicle guidance of heat source equipment to install on the roof to procedures such as suspending parts from cranes, assembly, and movement. We were able to confirm the points of danger when bringing in these parts based on the animations. On the day to arrange the equipment, we were able to perform installation with only a basic check, which allowed for safe and efficient work.







Simulation for arranging equipment

## **Chronological Order of Project**

This project began with an Environmentally Energy Saving Idea Competition that every corporate division and branch could participate.



June 2009
Environmentally Energy
Saving Idea Competition





ONovember 2010
Construction began



OSeptember 2011
Completion

Hereafter, we conducted verification and ongoing energy-saving measures



Idea Competition



Project meeting



Demolition work began



Green wall installation



High-efficiency air cooling turbo heat pump chiller installation



Issue of drawings



Solar cooling system installation

## **Initiatives to Improve Operation**

#### Organization



We established the Energy Management Committee and strived to verify the energy-saving effect and continually improve the operation to reduce our primary energy consumption by 40%.

#### Organizational Chart

## Energy Management Committee (Regular monthly meetings)

#### **Operation Working Group**

Gathers user feedback and requests, increases awareness about operation methods, and proposes environmental improvements

Energy saving management promoter on each floor / in each department

#### Cx\* Working Group

Analyzes and evaluates operational performance and proposes ways to enhance performance

\*Cx (Commissioning): Process to confirm and improve performance of building equipment

#### **Enlightenment Activities**

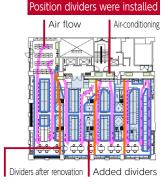


We shared our results from our monthly energy consumption (entire building, by application, etc.), energy reduction rate ranking for each floor, and explanations of our energy saving systems on the internal message board. This helped heighten awareness about the energy savings of employees.

# Improving Thermal Environment through Addition of Dividers Under Raised Floors



After renovation of the building, low-temperature air was blown from the floor vents around windows in the harsh winter seasons, worsening the indoor thermal environment. Therefore, we installed dividers under the raised floors. We reduced the amount of floor space that touched slabs for warm



air blown from the air conditioner by installing dividers to surround desks and other areas where air outlets were not installed. As a result, the temperature of air blown from the floor air outlets around windows increased, improving the indoor thermal environment.

#### Installation of Task Lighting



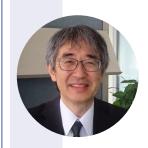
We had problems with shadows above desks due to the layout of lighting equipment and fixtures. We then change from a general lighting system to a task and ambient lighting system for the purpose of improving the lack of light above desks in some areas and reducing electricity used for lighting.

The total lighting system had controlled light with a light setting value at 500 to 700lx. However, the ambient light setting value operates at 350lx for the task and ambient lighting system. Task lighting was also able to adjust brightness as necessary for each person at their desk. As a result, we were able to reduce power consumption of lighting by approximately 14%.

#### **Results of Major Initiatives**

Initiatives	Effectiveness
Improvement of operation methods for heat source system	System COP: 1.36 → 1.44
Transition to double pane windows	5°C increase in window surface temperature in winter
Renovations to air conditioners for server rooms	Energy for air conditioning: 30% reduction
Installation of LED lighting	Lighting power: 30% to 40% reduction
Installation of highly efficient Hf lighting	Lighting power: 20% to 40% reduction
ON/OFF control of each light fixture	Lighting power: 60% to 70% reduction
Strengthening of heat insulation for exterior walls	Heat transfer rate: 1.61 → 0.81 W/m²k
Green wall (bitter melons)	15°C reduction in window surface temperature in summer

#### **VOICE**



# Katsunori Ide Deputy General Manager Energy Management Committee Leader Technical Supervision Department, Technical Supervision Division

We have introduced a wide range of energy-saving technology to our headquarters building, but I think operation in-line with the usage behavior is required to gain the greatest energy-saving benefits. For this reason, we are always working to improve the operation while engaging in measures for improvement plans through the analysis of the operational performance as well as enlightenment activities for energy saving.

We had been releasing our targets externally and the energy-saving awareness of our employees was high at the time. By each person engaging in energy-saving activities, we were able to achieve our reduction one year ahead of schedule.

We can utilize the knowledge we have gained for this project in the future to generate further energy savings at the buildings our company is doing work. This will contribute to realizing a low-carbon society.

# **Business Activity Highlights**

Shinryo Corporation would like to contribute to society through its business activities.

Business Activity Highlights introduce CSR activities conducted through our primary businesses in this fiscal year.



#### **United Arab Emirates**

# District Cooling Plant for the New Abu Dhabi International Airport Terminal

This plant is to supply thermal energy to the new Midfield Terminal Complex airport terminal built to handle the growing number of travelers using the airport in Abu Dhabi in the United Arab Emirates.

The plant provides a supply of 55,000USRT with 18 chillers and two thermal storage tanks. Shinryo Corporation was involved in engineering, resource procurement, construction, and commissioning. This plant was comparable to the large scale construction of the biggest district heating and cooling systems in Japan built in the Shinjuku District of Tokyo up until now which Shinryo Corporation also took part in.

We reduce the amount of cold water delivered by connecting two chillers in series which use cold water that has a difference in temperature between 14°C to 9°C in the upstream refrigerators 9°C to 4°C in the downstream chillers.

Furthermore, every saving is made through controlling the variable water volume. We also provided maintenance, security and energy management as well as greater operational efficiency by aggregating cool water supply Building overview

Official name: District Cooling Plant I Stage and II Stage
Construction for Abu Dhabi International Airport Expansion
Open: January 12, 2016 (Date of opening ceremony)
Total floor area: Approx. 12,261 m²
Building application: District Cooling Plant
Primary heat source equipment: Turbo chillers (2,500USRT X
18 units) and stratified cold water tanks
Thermal tanks (25,000 tons X 2 units)

equipment.

We were able to bring the work to completion without any incidents in spite of broad challenges from a harsh work environment with temperatures over 50°C in the summer as well as cultural and language barriers brought about by a multinational and multicultural workforce.

The number of travelers using the Abu Dhabi International Airport is expected to double over the next ten years. Plans to expand the airport in a manner able to handle this demand are already underway. This project is only part of the whole. The construction of the new Midfield Terminal Complex is set to be completed by the end of 2017.

Shinryo Corporation hopes to utilize the vast experience and confidence it has gained in future projects.

New Abu Dhabi International Airport Terminal District Cooling Plant





#### Miyagi

#### S-PAL Sendai East Hall

Construction of the S-PAL Sendai East Hall started construction as planned even damage was done to the Sendai Terminal Building during the Great East Japan Earthquake. The East Hall had its grand opening in 2016 – five years after the disaster – as a symbol for the local revitalization of the Tohoku Entrance.

Shinryo Corporation was in charge of the environmental control service work in the S-PAL Sendai East Hall. We integrated heat source water systems and refrigeration water cooling systems for energy saving. Moreover, the system realized waste reduction and greater efficiency in pipe work by adopting piping machined in plants for approximately 95% of the air conditioning piping during the installation.

This was also a very long project with a three-year construction period. We promoted better use of time outside of work by striving to have employees finish their work early without any overtime because there was no work on-site for the first half of construction.

S-PAL Sendai lays between the east-west walkway that connects the West Exit and East Exit of Sendai Station. The plan was founded in a concept for a new metropolis where



city and people meet with stores arranged from north to south. This complex brought people together from not only Miyagi Prefecture but also every other region of Tohoku. This shopping center earned praise from both Sendai and all of Tohoku as a symbol of the reconstruction of Tohoku.

Shinryo Corporation is proud and filled with joy to have played a small part in this construction toward revitalization after the disaster. The reconstruction of Tohoku has still only reached the halfway point. We hope to continue our efforts in a way able to contribute to this revitalization through our businesses in the future.



#### Tokyo

## Tri-Seven Roppongi

Tri-Seven Roppongi is a construction project moving forward as a new landmark positioned in the heart of three commercial and cultural icons; Tokyo Midtown, Roppongi Hills, and The National Art Center.

This building with two basement floors and fourteen stories is separated into lower (B2 to 3F, parking, and stores) and upper (4F to 14F, offices, and roof) floors. The base-isolation layer is designed between lower and upper floors and a standard European active chilled beam systems are being implemented for the offices. This will be the first large-scale building in Japan to implement roughly 2,200 units.

Shinryo Corporation was in charge of the environmental and automatic control service work. We realized efficient installation by adopting 3D-MAPS (3D measurement system),



3D-MAPS laser radiation
\*Illustration of laser beam on the photograph.



Supplementing laser radiation with specialized prisms

drainage slope confirmation tools, and other technologies developed by Shinryo Corporation for hanging chilled beams and installation checks.

Building overview

Official name: Tri-Seven Roppongi

Open: August 2016 Total floor area: 31,416 m<sup>2</sup>

Building application: Office, stores, ad parking



#### **Corporate Information**

Company Name SHINRYO CORPORATION

Headquarters Address 2-4, Yotsuya, Shinjuku-ku, Tokyo

Telephone +81-3-3357-2151 (Main) Date of Establishment February 23, 1956 President, Representative Director Takeshi Kagami

Number of Employees 2,066 people (non-consolidated)

(As of the end of September, 2016) 5,034 people (including Group companies)

Capital 3.5 billion yen

#### **Business Field** -

#### ODesign and construction of various building services

#### Environmental control service work

air conditioning and mechanical ventilation system / industrial air conditioning and mechanical ventilation system / constant temperature and constant humidity system / environmental reliability testing system / clean room system / bio-clean room system / dry room system / ice storage system

#### Plumbing, drainage and sanitary service work

water supply system / hot water supply system / gas supply system / soil and waste drainage system / kitchen equipment system

#### Automatic control service work

automatic control system / building management system / industrial automation system

#### Fire fighting service work

automatic fire alarm system / smoke purge and smoke extraction system / evacuation guidance system / indoor and outdoor fire hydrant system, sprinkler system, carbon dioxide firefighting system and other types of fire extinguishing system

#### Electric service work

power reception and transformer system / main and sub main power distribution system / lighting and small power system / extra low voltage system / lightning protection system / power generation system

#### Urban utility service work

district heating and cooling system / waste transportation system / energy supply systems

#### Information management service work

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

#### Cogeneration service work

power generation system / heat recovery system

#### Power plant service work

ventilation and air-conditioning system for nuclear power plants, thermal power plants and fuel cycle related facilities and R&D centers / special filtering system / waste treatment system

#### Environmental sanitation and hygiene service work

potable water distribution system / sewage collection and disposal system / greywater recycling system / sewage treatment system / industrial waste water treatment system / waste treatment and dust collection system

#### Industrial production service work

pharmaceutical and food plant facility / petroleum-related facility / other plant facility

#### Refrigeration service work

freezing and refrigerating system / ultra-low temperature and high accuracy temperature control system

#### Special service work

solar energy utilization facility / aquarium facility / aquaculture facility / swimming pool system / bio-hazard facility / air quality control system / weather simulation facility / snow making facility

#### Opening and construction of building

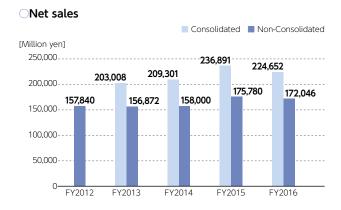
clean room / plant building / interior finishing work / associated construction work for building services / general building facility

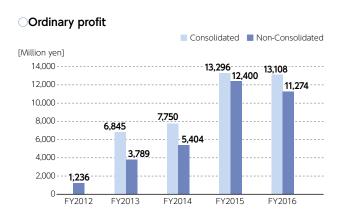
#### Sales of air conditioning equipment

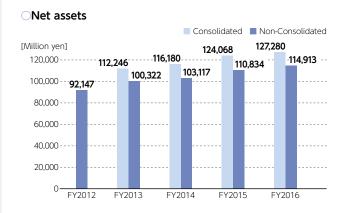
air conditioner and other heating and cooling product / fan and blower / sanitary ware / other product related to air conditioning and ventilation

#### **Business Performance Trends –**









#### Organization General Affairs Marketing Supervision Division Department **Public Relations** Department Administrative Division Accounting and Finance Department Information Systems Department International Administrative International Management Division & Accounting Department Procurement Department **Technical Supervision** Department Technical Supervision Division Safety Supervision Department Research and **Development Center** Gunma office, Tochigi office, Tsukuba office, Kawaguchi office, Tokyo Metropolitan Area Division Kanto branch office Nagano office, Kofu office Chiba branch office Urban Environment Niigata office Division Osaka branch Air Conditioning office **Equipment Division** Nagoya office, Kobe office Rokkasho Center, Tokai Center, Nuclear Power Wakasa Center, Yokohama Center, Plant Division Takahama Plant Electric & Instrument Division HONG KONG Branch, MACAU Branch, Hong Kong Regional Office DUBAI Branch, ABU DHABI Branch, **Audit Division** MAURITIUS Branch KL ENGINEERING CENTER, Singapore SINGAPORE Branch, Regional Office **CAMBODIA Branch** Hakodate sub-branch office, Hokkaido Branch Asahikawa sub-branch office Aomori office, Iwate office, Akita office, Yamagata office, Fukushima office Tohoku Branch Marunouchi Branch Yokohama Branch Kanazawa office, Fukui office Hokuriku Branch Gifu office, Shizuoka office, Nagoya Branch Hamamatsu office, Numazu office Keiji branch Shiga sub-branch office office Kobe branch Osaka Branch office Tenri sub-branch office, Wakayama sub-branch office Sanin sub-branch office Okavama office. Chugoku Branch Mizushima sub-branch office Yamaguchi office Matsuyama sub-branch office Shikoku Branch Kumamoto office, Kyushu Branch Nagasaki sub-branch office, Kagoshima sub-branch office, Okinawa office

# Shinryo Group Network

Shinryo Group Network is delivering a wide range of products and services to our customers.

Some of the products and services Shinryo Corporation provides from sites throughout Japan are people- and environmentally-friendly air conditioning and water-supply and drainage sanitation, and electrical equipment, assured production environments that realize leading-edge products, urban- and locally-friendly district heating and cooling systems, safe and secure plant equipment technology, and total information systems to support maintenance management and energy savings.

Shinryo Corporation is also delivering refreshingness to the world even overseas with particular focus on Asia and the Middle East.

#### SHINRYO CORPORATION

- HONG KONG Regional Office
- HONG KONG Branch
- MACAU Branch
- DUBAI Branch
- ABU DHABI Branch
- MAURITIUS Branch
- SINGAPORE Regional Office
- KL ENGINEERING CENTER
- SINGAPORE Branch
- CAMBODIA Branch
- INDIA Liaison Office
- MEXICO Liaison Office

## **Japanese Group Companies**

#### **Shinryo Technical Service Corporation**



Environmental control service work, plumbing, drainage and sanitary service work, renovations, yearly maintenance of buildings, maintenance management, equipment diagnostics and maintenance, acquisition, sale, leasing, mediation and management of real estate

#### Shiroguchi Co., Ltd.



Plumbing, drainage and sanitary service work, environmental control service work, fire fighting service equipment consulting, design, installation, renewal, and maintenance management

#### Daiei Denki Co., Ltd.



Design, installation, contracting, and maintenance management of electric equipment, firefighting equipment, electric communications, etc

#### Shinryo Kogyo LTD.



Sales, design, installation, after-care services of sewage processing devices, VOC dissipation measurement chambers, and public pump equipment as well as industrial machine equipment

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



Hotel businesses, hospital and welfare businesses (in-patient meal services, food services for welfare facilities, and restaurants in hospitals), and office and tenant lease service

#### Global Staff Co., Ltd.



Human resource deployment and introduction services, business outsourcing services, e-commerce, and media businesses

#### SYSPRO CORPORATION



Development of 3D CAD and FM systems, IT network configuration services, 3D model input, BIM implementation support services, CAD education, and software sales

#### LE PRO CORPORATION



Creation of designs and work drawing for construction of building equipment as well as cumulative quantity tables, creation of 3D models from three-dimensional laser scanning, and environmental measurement as well as trail run adjustment operations



#### SHINRYO (HONG KONG) LTD.

Unit 3708, 37/F, Skyline Tower, 39 Wang Kwong Road, Kowloon Bay, Hong Kong

#### SHINRYO (HONG KONG) LTD. MACAU BRANCH

6B, 6/F, Chong Fok Commercial Centre, 1287 Avenida da Amizade, Macau

#### SHINRYO TECHNICAL SERVICES LTD.

Unit 1805, Wang Lung Industrial Building, 11 Lung Tak Street, Tsuen Wan, N.T., Hong Kong

#### TAIWAN SHINRYO CO., LTD.

10F No.28, Jinjou St., Jungshan Chiu, Taipei, Taiwan, 104 R.O.C.

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

Rm.404-406 One Corporate Plaza, 845 A.Arnaiz Ave., Makati City Manila 1200, Philippines

#### THAI SHINRYO LTD.

Green Tower, 7th Floor, 3656/18-19 Rama 4 Road, Klongton, Klongtoey Bangkok 10110, Thailand

#### THAI SHINRYO LTD. MYANMAR BRANCH

Room 305, 2nd Floor, Building 15, MICT Park, Hlaing Township, Yangon, Myanmar

#### SHINRYO (MALAYSIA) SDN. BHD.

Unit 24.02, 24th Floor, Menara KH, Jalan Sultan Ismail, 50250 Kuala Lumpur, Malaysia

#### SHINRYO SINGAPORE PTE, LTD.

6 Shenton Way, #15-08 DUE Downtown 2, Singapore 068809

#### PT.SHINRYO INDONESIA

Graha Pratama, 10th Floor, JL. MT. Haryono kav. 15 Jakarta 12810, Indonesia

#### SHINRYO VIETNAM CORPORATION

3/F., Saigon Prime Office Building 107-109-111 Nguyen Dinh Chieu Street, Ward 6 District 3, Ho Chi Minh City, Vietnam

#### SHINRYO VIETNAM CORPORATION HANOI BRANCH

4/F., Lac Hong Office Building No.85 Le Van Luong Street, Nhan Chinh Ward, Thanh Xuan District, Hanoi City, Vietnam

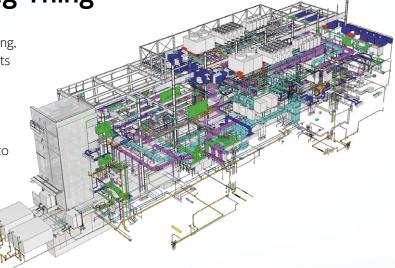
# **Construction Track Record**

"Buildings Are a Living Thing"

If we take a glance inside the walls of a building, we will see systems from air conditioning ducts and pipes to electric wires running back and forth and up and down everywhere.

These systems provide the air, water, and electricity to be comfort with energy savings to each room in the building.

"Buildings Are a Living Thing" Shinryo Corporation is tasked with designing and creating buildings to breathe.







Toranomon Hills (Minato-ku, Tokyo)



Palace Hotel Tokyo•Palace Building (Chiyoda-ku, Tokyo)



THE LANDMARK TOWER YOKOHAMA (Yokohama City, Kanagawa Prefecture)



Dai Nagoya Building (Nagoya City, Aichi Prefecture)



NAKANOSHIMA FESTIVAL TOWER (Osaka City, Osaka)



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



Otemachi District, Marunouchi 1-chome District DHC (Chiyoda-ku, Tokyo)



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



Yakult Central Institute for Microbiological Research, Basic Research Building (Kunitachi City, Tokyo)



Hiroshima University Hospital Clinic Building (Hiroshima City, Hiroshima Prefecture)



Okinawa Institute of Science and Technology Graduate University (Kunigami District, Okinawa Prefecture)



SUNTORY WORLD RESEARCH CENTER (Soraku-gun, Kyoto)



STANLEY ELECTRIC CO., LTD. Hatano Factory Building No. 1 (Hadano City, Kanagawa Prefecture)



SENDAI UMINO-MORI AQUARIUM (Sendai City, Miyagi Prefecture)
\*Photograph of aquarium [INOCHI KIRAMEKU UMI]



SAPPORO RACE COURSE (Sapporo City, Hokkaido)



Kanto Glico Co., Ltd. Kitamoto Factory (Kitamoto City, Saitama Prefecture)





Marina Bay Sands Complex (Singapore)



The Mass Transit Railway Corporation (Hong Kong)



Honda Motor Co., Ltd., Wako Building (Wako City, Saitama Prefecture)



Petronas Penapisan (Melaka) Sdn Bhd Cogeneration Plant (Malaysia)



THAI KYOWA BIOTECHNOLOGIES CO., LTD. (Thailand)



Sharp Corporation Kameyama Factory (Kameyama City, Mie Prefecture)



Changi International Airport Terminal 3 (Singapore) "Courtesy of Civil Aviation Authority of Singapore"



The Venetian Macao Resort (Macau)



Discovery Garden DCS\* Plant (Dubai)
\*DCS: District Cooling System

#### Vision, Statement & Management Plan

Shinryo Corporation is engaged in business activities which follow our management vision "Create a Freshening World".

Management vision is what Shinryo Corporation continues to strive for and activities based on it will lead to contribution toward sustainable development of the society.

#### Shinryo Corporation is engaged Contribution to development of a sustainable society



#### **Shinryo Corporation CSR Statement**

Shinryo Corporation CSR Statement that includes medium and long-term business management gives details contained in the medium and long-term business management plan (three year plan). It is a statement that we see it necessary to achieve in order to fulfill social

responsibilities together with business continuity and growth. Furthermore, this statement is newly formulated based on changes in the generational / societal backgrounds, and it is a policy for execution strategy.

We, Shinryo Corporation, based on our management vision, declare following three initiatives to evolve into an environment creation company.

We will provide high quality, resource saving, energy saving production through new operation model that makes full use of leading edge methods, and our own unique one stop service that achieves most suitable and comfortable life cycle management.

We will expand these technologies globally and engage in solving social challenges, of preventing global warming and safe, secure and effective use of energy.

We will engage in creation of a foundation of all business activities that is managed highly transparently and having a business climate that is easy to work in.

#### **CSR Promotion System**

With the aim of achieving "Create a Freshening World" based on our management vision, the CSR Committee was established with an executive in charge of CSR as Chairperson as shown in the diagram on the right.

We promote activities together with the CSR executives selected from each section and group companies with the CSR Promotion Division at the center.



#### **CSR Priority Subjects and Basic Themes**

#### CSR Priority Subjects: Provision of new values to the society

- Build BIM + supply chain operation model
  - Promote 3D-CAD
  - Build a construction supply chain by modularization and innovation in procurement and delivery process
    • Increase efficiency of
  - construction, reduction of construction resource and environmental impact
- Life cycle management (LCM) services
  - Provide our own LCM services which combine BIM, commissioning, CFD and FM technologies
- 3 Initiatives in energy conservation technologies and low carbonization technologies
  - Develop and provide energy related technologies and low carbonization technologies
  - Provide optimization and area energy network technology to both suppliers and customers

#### Global expansion 4

 Improving human basis for the expansion of overseas

#### **CSR Basic Themes**

#### Compliance initiatives

- Compliance training opportunities, and implement continuity
- Promote use of consultation service "Helpline"
- Build PDCA for the Compliance Promotion System Promote CSR procurement

#### Initiatives in work-life balance on-site

- Achieve efficiency by reorganization of operation model
- Reduce on-site workloads by upgrading logistics support

  Improve effectiveness of the
- holiday system

#### Initiatives to insure business 3 continuity during emergency

- Rebuild BCP (including review of crisis management measure regulation)
- Response to emergencies that include partner companies
- Provide emergency supplies to surrounding communities

#### Initiatives in diversity

- Introduce rehiring system Extend the period of working
- hour reduction system for childcare

#### **Environment conservation** and social investing

- Initiatives to reduce CO2 in
- constructionSupport environment conservation activities

#### Implementation of training and human resources development

- Business information management and personal information protection
- Upgrade training system for employees and partners

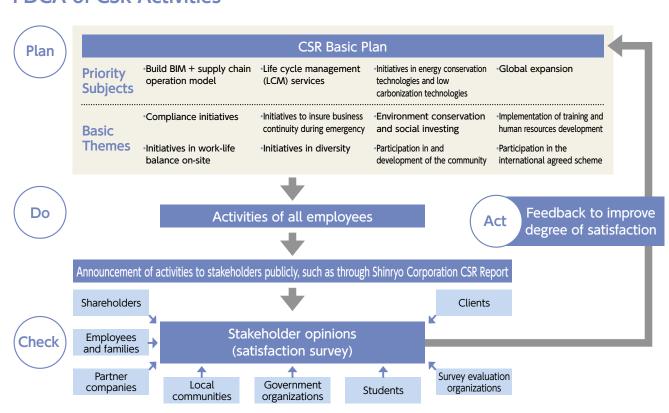
#### Participation in and development of the community

- Introduce volunteer leave
- Contribute to the community through concluding disaster prevention agreements with local jurisdictions and community

#### Participation in the international agreed scheme

- The United Nations Global
- Caring Company Scheme (Hong Kong)

#### **PDCA of CSR Activities**



# **Activity Results of Shinryo Corporation**

CSR initiatives are set based on "provision of new value to the society" and "fundamental theme and corporate governance".

Build BIM + supply chain operation model  Life cycle management (LCM) services Improve  R&D and	lization of construction utilizing 3DCAD  g of a new "operation model"  ement of LCM service system  d utilization of energy-related and low technology
Priority subjects: Provision of new values   Priority subjects: Provision of new values   Priority subjects: Provision of new values	g of a new "operation model"  ement of LCM service system  d utilization of energy-related and low technology
Build BIM + supply chain operation model  Life cycle management (LCM) services  R&D and a service are a service as the service are a	g of a new "operation model" ement of LCM service system d utilization of energy-related and low technology
2 Life cycle management (LCM) services Improve	ement of LCM service system  d utilization of energy-related and low technology
(LCM) services R&D and and a service R&D and a s	d utilization of energy-related and low technology
	technology
Initiatives in chergy	
conservation technologies and low carbonization technologies technologies and low carbonization technologies technologies and low carbonization technologies and low carbonization technologies technologies and low carbonization technologies are carbonization technologies and low carbonization technologies are carboni	d utilization of air quality improving ogy
	power: Initiatives in waste treatment, missioning and decontamination
	g of human infrastructure toward on of overseas business
Basic themes and corporate governance	
Corporate governance Internal	control, operating audit
Complia	ance education
"Helplin	e" consultation service
Compliance initiatives Respond	ding to antisocial forces
	ocurement
● Informati	tion security management
Initiatives to insure business continuity during emergency	ation and promotion of BCP
Environr	ment management system
	ration of CO <sub>2</sub> reduction on-site
Environment conservation and social investing Reduction	on of vehicle exhaust gas emission
Proper h	handling and treatment of asbestos and bus substances
	ion of measures for improving on-site and administrative skills
	ination of trouble information
Streamli	ining by operation model reform
Initiatives in work-life	on of on-site work by logistics support
Improve	ement of effectiveness of various n systems
"Online	Mental Support"
employe	
Promoti participal forms of the second of th	ion of systems to encourage active action of senior employees
	ment of people with disabilities
Participation in and development of the community Relation	nships with local communities
	ited Nations Global Compact
8 international agreed scheme Caring C	Company Scheme

<Degree of achievement of initiatives through self-evaluation>

 $\bigcirc$ : Initiatives implemented that produced results  $\triangle$ : Initiatives implemented that need even higher results  $\times$ : Initiatives not executed \*FY2016 (October 1, 2015 - September 30, 2016)

Initiatives in FY2016	Achievements of FY2016	Degree of achievement	Reference page
Expansion for centralized creation of BIM data and building of new operation models through effective utilization of the BIM data	Promotion of operation model building through the effective use of BIM data	0	
Continuous strengthening of the LCM service system that integrates Group companies	Promotion of stronger service systems integrating technology such as commissioning, CFD, and FM	0	Feature 1
Continuous promotion of development / sales / installation of various energy conservation technology and low carbon technology	Sales promotion of formaldehyde removal system and tobacco odor removal devices	0	7-10
Continuous promotion of technical and personal exchanges with local companies	Start of technical education for technology of the second engineer group of 10 people from SHINRYO (PHILIPPINES) COMPANY, INC. in Japan	0	36, 38
Continuous review of internal control systems	Continued operation of internal control systems	0	23
•Formulation and expansion of overseas support compliance guidelines •Creation of a collection of compliance cases •Implementation of e-Learning related to compliance •Continuous implementation of Antimonopoly Act training	Formulation of measures for overseas guidelines and introduction of compliance education for all executives and employees (100%) in overseas branches and overseas local companies.  Start of operations with the Guidelines for Anticorruption Overseas  Implementation of e-learning on compliance  Ongoing implementation of Antimonopoly Act training  Start of compliance liaison conference activities of Group companies in Japan	0	25-26
Continuous implementation of information security education and verification of its effects	Implementation of information security audits for our bases and on-site Revision of Management Rules of Corporate Information	0	24
Formulation of BCP, and implementation of drills	Reorganization and strengthening of Business Continuity Plan (BCP) structure Introduction of comprehensive BCP drills	0	24
<ul> <li>Continuous operation of environmental management system ISO14001</li> <li>5% increase in CO₂ emission reduction compared with FY2015</li> <li>Adoption rate of environmentally friendly vehicles as company vehicles: 20%</li> <li>Continuous implementation of proper removal, management, and treatment in accordance with the law (100% implementation)</li> </ul>	-Continuous operation of environmental management system ISO14001 -16% reduction of CO <sub>2</sub> emissions compared to FY2015 -Adoption rate of environmentally friendly vehicles as company vehicles: 22% -Continuous implementation of proper removal, management, and treatment (100% implementation) -Expansion of ecological conservation activities and the Environmental Renaissance Activities enlightenment program	Δ	27-30
Formulation of education plans by department based on company-wide education plans to promote effective education at divisions and branches	Planning and expansion of education distinct to each division Start of elective external seminars for mid to higher level employees	0	37-38
Promote the reduction of on-site work by logistics support	Start of logistical support for on-site operations through the Technical Supervision Department and Safety Supervision Department	0	Feature 1 7-10
Continuation of promotion activities to improve the usage ratio of various leave systems	-Start of work style reform (elimination of long working hours and realization of work-life balance) -Introduction of no overtime days at each on-site (extracting site models)	0	33-34
Examination and implementation of systems to encourage the efforts of all employees, including female and the elderly, and measures to cultivate a corporate culture	Start of operations with work-life balance programs (come-back system and transfer system to accompany spouse) Revision of human resource policies for active participation of senior employees Introduction of education for active participation of female employees (management career training and career design training for female employees) Continued implementation of training in Japan for active participation of employees at overseas local companies Continued communication of information through in-house magazine, etc.	0	35-36
<ul> <li>Examination and implementation of activities involving biodiversity</li> <li>Examination and promotion of implementation of people involved with regions unique to divisions and branches</li> </ul>	•Expansion of volunteer activities unique to corporate divisions and branches •Continued implementation of deployment of instructors to universities	0	39-40
•Strengthen initiatives to participate in Global Compact Network Japan and CBCC meetings •Examination of participation in new frameworks	New participation in Global Compact Network Japan's environmental management conference	0	3



Based on our CSR Statement, we are engaged in fostering high transparency in management and a corporate climate that facilitates work, which are the foundation for all business activities. We have also prepared a corporate governance structure and internal control mechanisms to secure transparency in management and to conduct prompt decision-making. In addition, we are striving to build a system that enable us to fulfill our corporate responsibility even during crisis by thoroughly implementing measures at all times.

#### Corporate Governance System-

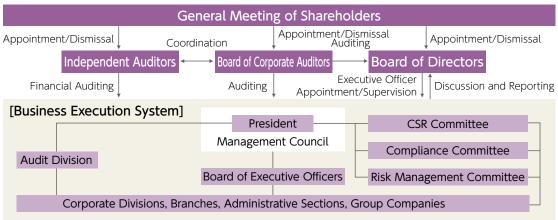
The Board of Directors deliberates submitted agenda items based on agenda and reporting criteria stipulated by agenda items and by Board of Directors rules set forth in the Companies Act. The Management Council deliberates on important matters concerning company management, in addition to proposals submitted to the Board of Directors.

The 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, from 2013, 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 Committee and supervisors in each division and Group company, while also conducting policy decision-making and corrective guidance with regard to consultations and information received through the Helpline consultation service.

#### **OCorporate governance system**



#### Internal Control

Since the construction of the internal control system is mandated by the Companies Act, Shinryo Corporation has 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 (excerpted from resolutions of the Board of Directors)

- 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

#### **Risk Management**

#### **Risk Management Committee**

Shinryo Corporation is extracting vital risks such as technological and contractual risks in large-scale jobs which have the potential to greatly affect management and periodically holds Risk Management Committee meetings to debate measures to respond to these risks.

#### **Information Security Management System**

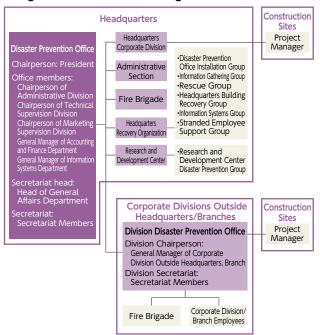
Shinryo Corporation strives to appropriately manage the information of our customers and partners. In July 2016, we revised our Management Rules for Corporate Information to renew our internal rules related to information security management which is growing ever more complicated. In addition, we are introducing security audits for our primary business offices and on-site offices while actively working in awareness building such as raising awareness about the latest security incidents and measures to prevent them and periodic employee education.

#### Strengthening of Business Continuity Plan (BCP) Structure

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

- 1. Immediately provide support by prioritizing the safety of executives and employees.
- Sustain ongoing operation of corporate functions by recovering company facilities as soon as possible.
- 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.

#### Organizational Structure During Disasters



Reorganization and Strengthening of Business Continuity Plan (BCP) Structure Shinryo Corporation formulated the Business Continuity Plan (BCP) in July 2016 and revised the Crisis Management Measures Regulations based on our response to the Great East Japan Earthquake and Kumamoto earthquakes. The revisions reworked measures such as strengthening our business continuity structure in emergencies and introducing periodic drills.

#### Introduction of Comprehensive BCP Drills

Shinryo Corporation introduced comprehensive BCP drills in September 2016 that assume an earthquake that directly hits the Tokyo. The Disaster Prevention Office is chaired by the President and conducts evacuation drills for people in the building and drills to confirm the safety of our employees. We were able to confirm a practical initial response during

disasters from gathering information to directing the response of each organization from the Countermeasure Office. We revise and improve the BCP by implementing

ongoing training.



Drills of the Disaster Prevention Office

# Introduction of Training to Secure BCP System We are now holding periodic drills to secure our BCP structure.

## Main Periodic Drills and Educational Content

Drills and educational content	Targeted groups
Drills to confirm the respond and collaboration systems between sites in the event of a disaster	Disaster Prevention Office members
Drills for employees to report whether they are safe with the safety confirmation system	All executives and employees
Drills to confirm response in the event of a disaster	Fire Brigade

#### **Prepared Emergency Response**

In addition to distributing disaster response bags to all of our employees, we put in place our response for business continuity that includes the preparation of a disaster stockpile, installation of emergency generators at our headquarters building, redundancy of communications lines (distribution of emergency satellite telephones to each company base and use of Internet connection), and implementation of cloud servers.

#### Response to the Kumamoto Earthquakes

Shinryo Corporation immediately launched the Disaster Prevention Office at our headquarters when the Kumamoto earthquakes struck in April 2016. This office confirmed the safety of our employees and their families, surveyed the damage incurred by our customers, and handled the reconstruction. In addition, a total of 10,000 people engaged in support for the business continuity of our customers through the cooperation of our employees and everyone at our partner companies.



The aim of Shinryo Group is to realize sincere, fair, and appropriate management, and to fulfill the social responsibilities placed upon the Group's. As a company aiming to "Create a Freshening World", we participate in corporate ethics and legal compliance and work so that we will gain the support of all of our stakeholders.

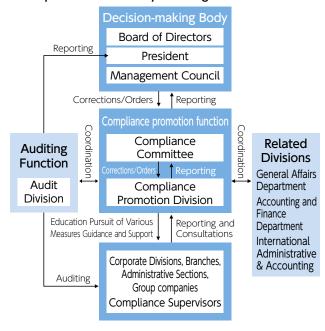
## **Comprehensive Compliance**

Shinryo Group believes comprehensive compliance is the most important issue in management. All of our executives and employees of the Group are practicing legal compliance, which is at the heart of the Company Philosophy to "Be fair and straightforward" in our actions.

#### **Compliance Promotion System**

We are building a Compliance Promotion System that encompasses our Group companies. We work to practice compliance unified as a Group with Shinryo Corporation Compliance Committee and Compliance Promotion Division at our core.

#### Compliance Promotion System diagram



#### **Shinryo Group Code of Business Conduct**

We, the excecutives 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.

#### Shinryo Group Code of Business Conduct

#### Code of Business Conduct 1

Pursue customer satisfaction by standing in customers' positions.

#### Code of Business Conduct 2

Pursue management efficiency for the sake of shareholders.

#### Code of Business Conduct 3

Create energetic and comfortable workplaces that staff can show their families how proud they are of their Company.

#### Code of Business Conduct 4

Together with our business partners, thoroughly comply with corporate ethics, laws, and regulations and conduct fair, transparent, and open.

#### Code of Business Conduct 5

Constantly pursue how we should be as a member of a healthy society.

#### Code of Business Conduct 6

As a global enterprise, contribute to the societal development of related countries.

#### Compliance Guidelines

Shinryo Group Compliance Guidelines are the basic principles all of the executives and employees of Shinryo Group must adhere to. These guidelines are founded in our Company Philosophy, Code of Business Conduct, and Standards of Conduct, and we have defined the Specific

Compliance Items for the Code of Business Conduct and Standards of Conduct, which are our evaluation criteria in conducting our day-today business. In addition, Shinryo Corporation and all of the executives and employees of Group companies have taken the guideline education and have committed to compliance.



"Shinryo Group Compĺiance Guidelines"

#### Establishment of the "Helpline" Consultation Service

We have a Helpline compliance consultation service installed with the objective of preventing legal violations or inappropriateness as well as quickly discovering and correcting signs of these issues. We are working to make it widely known by all persons participating in the work of Shinryo Corporation.

#### Initiative to Complete Compliance to the Antimonopoly Act

Shinryo Corporation received a cease and desist order from the Japan Fair Trade Commission on October 9, 2015 related to the collusive bidding of facilities construction of the Hokuriku Shinkansen train and was ordered on June 23, 2016 to suspend operations for 30 days from the Ministry of Land, Infrastructure, Transport and Tourism on Shinryo Corporation gravely and seriously accepted the case and all executives and employees will be fully committed to implement specific preventative measures and reinforce legal compliance.

#### Ongoing implementation of Antimonopoly Act training

We convened Antimonopoly Act Training in January 2016 for all of our employees in markting positions in Japan. We are deepening the penetration and understanding of comprehensive compliance to the Antimonopoly Act by continuing to hold this training every year.

#### Ten Articles for Compliance to the Antimonopoly Act

When fully revising Shinryo Group Compliance Guidelines, we have gathered ten principles we should take note of in our daily operations to thoroughly comply to the Antimonopoly Act, and we regularly check compliance of these principles.

#### Creation of Explanations on Related Laws and Regulations booklet

We created the Explanations on Related Laws and Regulations (Antimonopoly Act, Construction Industry Law, etc.) as a separate booklet to Shinryo Group Compliance Guidelines, and this booklet is used in education as a practical guide systematically gathering together the Antimonopoly Act and related laws that are distributed primarily to all executives and employees of Shinryo Corporation and sales persons of Group companies.

#### Implementation of Various Compliance Education

Shinryo Corporation continues to hold various compliance education. We implement a wide-range of education and development from education held by the Compliance Committee to curriculum unique to each department, and we work hard in business while all executives and employees always keep compliance in mind.

#### ○ Targeted Groups and Content of FY2016 Compliance Education

Targeted groups	Content		
All executives and employees	Compliance e-learning		
All executives and employees	Thorough confirmation of Antimonopoly Act		
Marketers in Japan	Antimonopoly Act training		
New employees	Secondary new employee education in FY2015		
New employees	2016 preliminary education of new employees		
Persons receiving promotions	Compliance education matched to grade		

#### **Explanations in Shinryo Compliance News**

We distribute Shinryo Compliance News by email regularly to all executives and employees. Survey is conducted in each issue to enable executives and employees to easily express their opinions or consult about compliance.

#### Shinryo Group Compliance Liaison Conference

Shinryo Group companies in Japan periodically hold Shinryo Group Compliance Liaison Conference. We exchange information such as the initiatives to improve systems at

each company in order to align the awareness of compliance throughout the Group. We also aim to coordinate plans and implementation of group wide compliance education.



Shinryo Group Compliance Liaison

#### Compliance related support of overseas branches / local companies

#### Formulation of Overseas Guidelines

We formulated the Compliance Guidelines (Global Version) for executives and employees in overseas local companies. We are defining basic mandatory principles to promote business activities suitable to different cultures and customs based on compliance to each type of international rule

which includes compliance to the laws and regulations in each country and region as well as human rights.

Moreover, all of our executives and employees of overseas branches and overseas local companies have taken our compliance education and vowed to adhere to this compliance as of August 2016.



Compliance Guidelines

#### Start of Operations with the Guidelines for Anti-corruption Overseas

Shinryo Corporation formulated and began operations under the Guidelines for Anti-corruption Overseas in October 2016. These guidelines clarify compliance items and the compliance system related to government officials when conducting business overseas. These guidelines also include countermeasures tailored to the circumstances of each country and region in addition to anti-corruption concepts common to each country.

## Responding to antisocial forces -

"Never yield to intimidation made by antisocial forces and resolutely face and eliminate them in a courageous manner." Shinryo Corporation complies with this stance in our Code of Business Conduct and Standards of Conduct, and makes it a part of our internal control. Moreover, we

are working for informational awareness to employees by revising our Requirements for Responding to Antisocial Forces that gathered response manuals and policies from countries in November 2015.



Shinryo Corporation has acquired the Environmental Management System ISO14001 certification in May 2001. We are striving to respond appropriately to the environment by conducting activities such as energy-saving proposals through business, reduction of CO2 emissions, asbestos measures, disposal of industrial waste, recycling, and retrieving of fluorocarbons.

## **Environmental Management System ISO14001** -

#### Basic Philosophy and Basic Policies Toward the Environment

#### Basic Philosophy

SHINRYO CORPORATION, as a company connected to the environment, has been practicing environmental preservation through building equipment, based on our mission of "Create a Freshening World". We shall continue to take aggressive actions to reduce environmental impact through corporate activities, and contribute to the preservation of the global environment into the future.

As a company which provides building equipment, as well as contributing to society, SHINRYO CORPORATION shall conduct the following and widely disclose this to the general public, in order to harmonize with a rich-green global environment and contribute to the construction of a recycling oriented society.

- 1. We shall establish and manage an environmental management system, in order to promote environmental preservation activities.
- 2. We shall accurately ascertain the impact of our business activities on the environment, and implement continuous improvements of the environmental management system, striving for pollution prevention.
- 3. We shall comply with all laws, ordinances, and regulations related to the environmental aspect, and observe the requirements of environmental agreements we have agreed upon.
- 4. We shall establish environmental targets and objectives within the scope of our technical and economic capabilities, and shall periodically revise them through our environmental preservation activities.
- 5. We shall take action focusing on the following items, through our environmental preservation activities.
  - Promotion of activities for productivity improvements during construction, in order to minimize the emission of greenhouse gases. Expansion of activities in consideration of the environment, in order to contribute to the minimization of greenhouse gas emissions at the
  - Promotion of the 3R\*s of construction by-products, striving for environmental preservation during construction.
- 6. As well as widely disseminating the environmental policy to all personnel who are engaged in the business activities or our company, we shall promote improvements in the consciousness of all personnel concerning environmental preservation, through the implementation of environmental education and awareness activities.

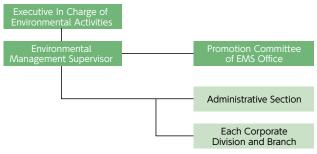
\*Reduce, Reuse, and Recycle

#### **Promotion System**

Shinryo Corporation minimizes its impact on the environment from the process of handling air, water, heat, and energy, and it has been engaged in activities that aim to create a comfortable environment with the mission to "Create a Freshening World," which the company has had since its founding.

We are actively working to reduce our global environmental impact based on this basic environmental conservation philosophy.

#### Environmental Management System



#### VOICE



Kimio Senda **Executive Vice President** In Charge of the Environmental Activities

Shinryo Corporation is a company inseparable from the environment as it is in business to provide environments. We have poured our strengths into environments for people, high-precision

environments for production equipment, and even developed technology to remove harmful substances to provide healthy environments. We have been aiming to hold the environment dear with our utmost passion since long ago.

Shinryo Corporation has put its full force into (1) care toward environmental savings, (2) reduction of the environmental burden by improving productivity at each stage of construction, and (3) the 3Rs as an environmental management system. I believe fully complying with laws and regulations such as the Construction Recycling Law and the Act on Rational Use and Proper Management of Fluorocarbons, and of course reducing the waste and energy consumption during construction as well as dramatically improving productivity effectively reduces the burden on the environment.

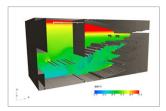
Environmental initiatives do not produce immediate results. Efforts need to accumulate for 10, 20, and even 50 years. I think we are all working every day to make sure we pass down a healthy world to the next generation as a company.

#### Initiatives to Reduce CO<sub>2</sub> Emissions and Save Resources

We are promoting the following initiatives to reduce CO<sub>2</sub> emissions and save resources.

#### Sales and Design Operations

Shinryo Corporation is actively offering proposals for energy saving systems and equipment to customers by obtaining characteristics of this equipment such as air flow and energy consumption with CFD\*. Furthermore, we strive to support energy savings and reduce CO2 emissions through visualization technology for the energy consumption of equipment systems as well.





Proposals for energy saving technology through CFD \*CFD: computational fluid dynamics

#### **Installation Operations**

We are striving to reduce CO<sub>2</sub> emissions through use of BIM, improvement of construction methods and improving productivity at construction sites. We are also actively engaging in 3R to reduce waste, promote recycling, and use environmentally-friendly materials, construction methods, and planning and implementation of installation management.



Equipment transport



Transport of valves in reusable boxes



Investigating fit using BIM with each

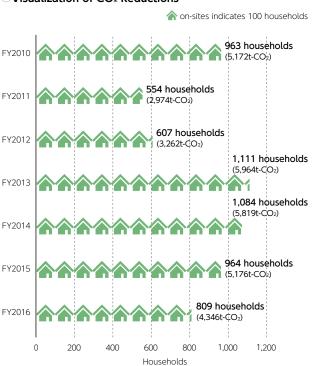


Marking using a tablet computer for

#### **Environmental Communication Project**

We have visualized CO2 emission reduction on-site since 2008. We convert and express the amount of CO<sub>2</sub> emission reductions on-sites by the CO2 emissions for each household.

#### ○Visualization of CO₂ Reductions



Amount of CO2 emissions from households: 5,370kg-CO2 / household per year Source: Carbon Dioxide Emissions from Households (FY2013), Japan Center for Climate Change Actions

#### Installation of Online Conference Systems

We introduced online conference systems throughout the company in June 2014 following the TV Conference System in 2008. With an Internet connection and a computer, tablet terminal, or smartphone, employees can have meetings while looking at one another's expressions and sharing materials no matter where they are in the world. Online conference systems are spearheading greater capabilities

in meetings between people in charge of each location and on-site solutions. We are reducing the CO<sub>2</sub> emissions, costs, and time required for travel and business trips through the use of this ICT technology.



Online meeting

#### FY2016 Environmental Targets and Activity Results

Our activity results between October 2015 to September 2016 are outlined below.

Responsible operation	Environmental target	Activity content		Target	Achievement
Design operations	Reduction of greenhouse gases through environmentally-	Reduction of CO <sub>2</sub> emissions during operations through design proposals for new buildings and renovation	Rate of proposals for CO <sub>2</sub> reductions	Over 50%	56.2%
operations	friendly design	new buildings and renovation	CO2 reduction rate	Over 30%	29.5%
Installation and manufacturing	Promotion of activities to improve productivity on-site	Reduction of CO <sub>2</sub> emissions on-site (implementation of activities to improve productivity)	CO2 reduction unit	90kg-CO <sub>2</sub> / million yen or more	73.4kg-CO <sub>2</sub> / million yen or more
operations	Promotion of 3Rs on-site	Promote recycling of industrial waste	Recycling rate of industrial waste	Over 80%	78.4%

#### **Asbestos Removal Initiatives**

Shinryo Corporation have appointed a person in charge of asbestos management at each corporate division and branch, hold regular meetings with these representatives, and have formulated guidelines to standardize asbestos removal operations in our company after establishing the Ordinance on Prevention of Health Impairment Due to Asbestos.

We have launched a database for when we receive orders for construction to remove asbestos, and conduct centralized management of analysis results and asbestos construction cycle operation records.

Shinryo Corporation is working with its full force to stop the spread of asbestos into the atmosphere while preventing health hazards to our employees and other workers related to removal operations by utilizing the asbestos construction cycle.

# Sharing and Utilization of Asbestos Removal Operation Examples

We are sharing and utilizing information throughout the entire company by submitting removal examples as reports from on-site employees in charge of asbestos removal operations in conferences for persons in charge of asbestos management.





Removal example

#### **Expansion to Partner Companies**

Health and Safety Council consisting from partner companies holds classes related to asbestos in labor and safety training and special education for workers.



#### **Asbestos Health Check-ups**

We thoroughly implement asbestos health check-ups for employees who have been exposed to asbestos or who have handled or removed asbestos in the past.

#### **Implementation of Asbestos Patrols**

We are periodically conducting asbestos patrols on-site through the Safety Supervision Department, Technical Supervision Department, and persons in charge of asbestos management.

We are confirming whether we are in full compliance with the law by checking both documents filed with government bodies and outsourcing contracts for industrial waste.



Confirmation of plans and submitted documents



Confirmation of notices and on-site measures



Confirmation of protective equipment and operational status



Workers wearing protective equipment

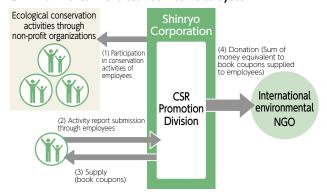
#### Ecological Conservation Activities Enlightenment Program "the Environmental Renaissance Activities" -

Shinryo Corporation is conducting the Environmental Renaissance Activities enlightenment program for the purpose of improving employee awareness about the importance of ecological conservation.

The program aims to improve motivation toward the understanding and ongoing activities for ecological conservation by supplying book coupons to employees conducting activities related to ecological conservation and environmental education as well as supplementing the purchase of books related to the environment.

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.

#### **Environmental Renaissance Activities System**



#### Organizations Employees have Participated (Example)

Organizations Employees have Participated (Example)			
Host organization	Activity		
Kawasaki City, Kanagawa Kawasaki Environment Research Institute	Tamagawa Riverside and Mudflat Life Observation		
Shinjuku-ku Environmental Studies and Information Center	Emerging Cicada Observation		
Kanagawa Prefecture Natural Environment Conservation Center	Crayfish Extermination Activities		
Kanagawa Prefecture Natural Environment Conservation Center	Special Rescue Animal Public Tour		
Hyogo Diamina Fritillary Butterfly Preservation Association	Mt. Takamaru (Hachikogen) Summer Butterfly Watching		
Japan Science Foundation, etc.	Youngsters' Science Festival 2015 "Learning the Importance of Natural Preservation Through Butterflies"		
New Revitalized Environment of Tajima Region Action Plan Promotion Council	Presentations About the Natural Environment of North Tajima "How do we protect the natural environment from dear to small plant life?"		
Environment Control Section, Environment Department Kakogawa City, Hyogo Prefecture	"Butterfly Observation Walk" in Kakogawa City, Hyogo		
Certified Non-profit Organization for Nature Conservation and History Transmission of Shishitsuka Satoyama	Tenoike Monthly Themed Observation Event		
Ibaraki Nature Museum	Let's Research Fossil Leaves of Trees		
Little Tern Project	Little Tern Nest Building Activity		
Yatsu-Higata Nature Observation Center	Wild Birdwatching		
Yokohama Nature Sanctuary Tomo-no-Kai (Bird Watching Team)	"Everyone Birdwatching (Wild Birdwatching in the Forest)"		
Yokohama Nature Sanctuary	Charcoal Making Experience		

#### **Introduction of Activity Report**

Crayfish Extermination Activities/Special Rescue Animal Public Tour (Kanagawa Prefecture Natural Environment **Conservation Center)** 

#### Hirohide Kikunaga Chief Designer, Nuclear Power Plant Division

I participated in an extermination initiative to have fun and catch crayfish, which are a non-native species. I came to

understand the difficultly of rejuvenating the ecological system once it is destroyed. I also took a special public tour of protected wildlife hurt by the lifestyles of mankind. I realized the importance to properly learning about wildlife.



Catching crayfish

## Wild Birdwatching (Yatsu-Higata Nature Observation

#### Naovuki Okada Senior Chief Administrator, **Accounting and Finance Department**

I participated in the Wild Birdwatching in Yatsu-Higata Narashino City, Chiba with my family. I came to understand the importance of Yutsu-Higata, which is a marsh registered

in the Ramsar Convention. I grew to become more aware of an environment where humans and birds co-exist. There were bird handcrafts held by the NPO and I learned about nature while having fun with my children.



Handcrafted tern

#### **Tenoike Monthly Themed Observation Event** (Kasumigaura Nature and History Association)

#### Ikuhiro Yamada Senior Chief Researcher, Research and Development Center

I feel I don't have many opportunities to interact with nature in my daily life so I participated in the observation event of

Satoyama around Tenoike in Kise of Tsukuba City, Ibaraki Prefecture. Experts even provided explanations and I was able to have a profound experience. I would like to participate in the cleaning activities of Satoyama as well.



Walking observation

#### Emerging Cicada Observation (Shinjuku-ku **Environmental Studies and Information Center)**

#### Shigeo Morioka General Manager, Accounting and Finance Department

We observed cicada during the stage of emergence as we

moved through Shinjuku Central Park. We were able to see the emerging cicada and other insects that we don't usually notice in our daily lives. I talked with my family about how my view of the world around me changed by having more awareness of nature.



Picture journal of emerging cicada



Shinryo Corporation acquired the Quality
Management System ISO9001 and is striving to
improve quality in order to satisfy our customers.
In addition, on-site safety and health management
at Shinryo Corporation is addressed in the basic
health and safety policy that we have had since our
founding.

#### **Quality Management System ISO9001**

#### **Quality Policy**

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

Shinryo Corporation has acquired Quality Management System ISO9001 certification at each corporate division and branch in Japan. We have been continuing to ensure quality and improve customer satisfaction through incorporating quality management system and continually improving sales, design, and construction management process.

We will continue striving to enhance our quality management system to accurately respond to customer needs and provide high-quality equipment and services.

#### **Initiatives in Quality Management**

Shinryo Corporation places "Construction Cycle" as the core of quality management system and is engaged in quality management at each construction site.

"Construction Cycle" is a system that identify and takes measures related to construction quality through discussion before start of construction, inspection during each stage of construction and after completion that confirms quality demands are met. We respond to customer needs from start of construction to after handing over to customers through proper execution of "Construction Cycle." Furthermore, in construction technology, we educate construction standards and trouble examples and appropriate assignment of certified staff to ensure construction quality.

#### **Shinryo Forum**

Shinryo Forum consists from comprehensive forum and seminar. Comprehensive forum connect every section and regional offices including overseas with TV conference system and offer place of exchange and sharing information for technology, design, and sales staff. The seminar is a

discussion meeting for the purpose of improving special technologies and sharing information between the employees. In FY2016, two comprehensive forum and seminar was held to increase technological capability.



Shinryo Forum

## **Health and Safety Initiatives**

#### **Health and Safety Policy**

Safety First for our Prosperity

Shinryo Corporation has prioritized safety above all else based on the basic health and safety policy we have held since our founding. All employees have been working in health and safety activities to prevent labor accidents. We believe there is a need for even greater health and safety to resolve problems such as a lack in skilled workers, increase of lower experienced workers, and aging workers to handle the increased workload and lack of workers in the future due to projects from the disaster reconstruction operations and the Tokyo Olympics.

#### 2016 Health and Safety Slogan

Strengthen safety patrol and specify the factor of danger and hazard, then let's prevent the serious accident

Shinryo Corporation is working to prevent accidents by formulating a Company-wide Safety and Health Campaign Policy each year. In the 2016 Company-wide Safety and Health Campaign Policy, employees and workers improved their sense of danger. We emphasize that identifying danger factors latent at construction sites and having the ability to build measures against those danger factors are the first steps to preventing labor accidents.

#### Cooperation with Partner Companies (Health and Safety Council) -

Since 1971, we have been improving safety awareness with the Health and Safety Council, which brings together the headquarters and each branch with our partner companies, by (1) conducting education about health and safety, (2) researching and implementing measures against causes of accidents, (3) offering education and guidance through patrols, and (4) raising awareness in public relations related to labor laws and other health and safety matters.

We hold training with themes from safety management of employees, relevant laws and regulations and compliance measures to prevention of human error and accidents in our labor safety training that brings together 200 participants from partner companies every year. This training is held with the cooperation of the Safety Supervision Department of Shinryo Corporation.

We are also conducting education in various aspects of health and safety with the Safety Supervision Department of Shinryo Corporation as the teachers. We are also providing cooperative activities to offer follow-up after the certification is acquired. In addition, we are improving



Health and safety promotion (Hosted by Health and Safety Council)



Health and Safety Council monthly patrol

safety awareness of the entire construction site through operational guidance from superiorly qualified persons. In our safety experience education, we are improving awareness of safety as "allowing absolutely no accidents on my site" while aiming to improve a sense of danger.

#### VOICE



#### Mitsuo Kobayashi General Manager Safety Supervision Department, **Technical Supervision Division**

Shinryo Corporation proceeds with construction work through daily confirmation and execution by all of our employees with safety as the top priority under the basic health and safety policy slogan "no

work without safety no company without safety" that we have held since our founding. In FY2016, we set the reduction of serious accidents as our highest goal and strove as a unified company to prevent accidents from crashes and falls as well as electrocution. As a result of repeatedly implementing comprehensive efforts from full inspections on every site for full understanding of accidents and preventing any recurrence to on-site safety patrols with the cooperation of the Health and Safety Council which unifies our partner companies as well as education to improve of labor management, we have been able to eliminate serious accidents and reduce accidents requiring four or more days off one-third compared to the previous year as of the end of September. We will continue to strive to improve health and safety without letting our guard down even including all partner companies for zero on-site accidents.

#### **CSR Procurement Guidelines**

Shinryo Corporation pursues CSR initiatives through cooperation and coordination with its business partners, especially partner companies. We have established Shinryo CSR Procurement Guidelines and have asked over 500 companies to cooperate in complying with the guidelines.

#### **Shinryo CSR Procurement Guidelines**

#### 1. Fair and sound corporate activities

We ask that companies engage in fair and sound business activities without unfair competition or actions that obstruct free competition.

#### 2. Quality, safety, and business continuity

We ask that you comply with laws and regulations concerning management of hazardous substances and product safety, and strive to ensure the health and safety of product users and consumers. We also ask that you engage voluntarily in initiatives for business continuity planning.

#### 3. Consideration of human rights, labor, and occupational health and safety

We ask that you respect basic human rights and pursue business activities that take the working environment and occupational health and safety into consideration.

#### 4. Consideration of the environment

We ask that you steadily implement environment conservation including biodiversity, and environmental management to undertake business activities with the global environment taken into account.

We ask that you comply with the laws and regulations of all nations and regions, as well as international treaties and social norms, and conduct business activities founded on corporate ethics.

#### 6. Management of information

We ask that you enact measures against threats to computer networks, while also appropriately managing and protecting confidential information concerning business and personal information, to avoid leaks or improper / illegal use. Please also strive to prevent leaks of confidential information belonging to customers and third parties.



As a global company, Shinryo Corporation respects human rights in all countries. We have also set "Create energetic and comfortable workplaces that staff can show their families how proud they are of their company" as part of our Code of Business Conduct, and engage in a variety of activities.

#### Work Style Reform -

#### Awareness of Work Style Reform

Long working hours is a major issue in the construction industry, which is a labor-intensive industry. Shinryo Corporation began work style reform to resolve long working hours in April 2016. We revised all of our operational processes with our executives in charge of work style reform at the core. These revisions aimed to realize a highly productive work style, correct labor practices that normalize long working hours, and realize a work-life balance.

As we approach efficient work styles, Shinryo Corporation needs to sustain and further improve the technological capabilities it has cultivated over the last 60 years. We continue to human resource education together with diversity initiatives with the objective of realizing a workplace that actively utilizes diverse human resources.

#### Introduction of a No Overtime Day

Shinryo Corporation has introduced a no overtime day every Wednesday at all of our branches and offices and 93 construction sites throughout Japan selected as model sites as the first step toward work style reform since April 2016.

We are also working to reach 100% implementation of no overtime days as a target in our operations by transferring work to another day when it cannot be done on Wednesday.

While actually adjusting the schedule throughout entire construction site only through Shinryo Corporation is difficult due to operations such as process

**Initiatives on Model Sites** 



No overtime day promotion

- Gain understanding and work together by consulting about no overtime days with customers and on-site workers
- Reduce daily one-hour on-site meetings to 20 minutes through proceeding in a more efficient manner
- Share schedule data to adjust days or acquire days off when no overtime days cannot be implemented

management and urgent response, we are practicing no overtime days while reforming the model for each site.

#### **Education of Work Style Awareness Innovation**

We held the Challenge for work style reform as Management Strategy class lead by Yoshie Komuro (Work Life Balance Co., Ltd.) for executives and general managers in September 2016. This class taught currently needed strategy is to solve long working hours and an aging society with fewer children, which are issues faced by society in

Japan. In addition, executives and general managers learned these innovations aim for an attractive workplace building which diverse people can work can exert their strength through short and efficient working hours and working locations regardless of whether a man or woman.



#### VOICE



#### Yasunori Abe Managing Executive Officer In Charge of Work Style Reform

There are two types of work style reform for Shinryo Corporation; (1) correcting long working hours and (2) realizing a work-life balance. Long working hours are a big problem in the construction

industry. I believe we would not be able to respond to the changes of society in the near future if we ignored this major issue. Therefore, we need to reform each and every aspect toward realizing this goal in order to resolve this problem.

These work style reform started in FY2016. We also set and started executing no overtime days once a week. We will begin work style reform and operations in FY2017 to create what I hope will be an attractive workplace for each person and also improve productivity as a company.

#### Initiatives for Work-Life Balance

#### Formulation of Work-Life Balance Support Programs

We are formulating policies for employees to actively use in the long term so they can care for family, give birth, and raise children as well as work to increase their motivation to work.

#### **Transfer System to Accompany Spouse**

This system allows employees to transfer when an employed spouse has been transferred and they want to keep work at a Shinryo Corporation office and if a place at that office is available.

#### **Come-back System**

This system 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.

#### **Acquisition of Various Leave**

We have introduced a leave acquisition promotion system, which includes project leave, anniversary leave, and refresh leave, to build a working environment that leave can be taken easily while also supporting the physical and mental health of employees.



Employees qualified for Refresh Leave (FY2016 commendations for 30 years of

## Physical and Mental Health of Employees

#### **Health Management**

#### Introduction of Health Consultation Office

We have set up daily care by resident nurses and a consultation office once a week by an industry doctor at the clinic in our headquarters. We are also building an

environment for employees to work with peace of mind by introducing a 24-hour health consultation service where employees can consult with experts about physical and mental health concerns by phone or by email.



Health consultation with a nurse at the

#### Participation in Walking Campaign

We have participated in the Walking Campaign held by the Kankogyo Health Insurance Society since 2009. Participants work to overcome a lack of exercise daily and better their health with the goal of 10,000 steps each day.

#### OCampaign Participation Rate and Achievement Rate for More than 10,000 Steps

	2014 Spring	2014 Fall	2015 Spring	2015 Fall	2016 Spring
Participation Rate	98.9%	99.0%	98.8%	98.6%	98.1%
Achievement Rate	65.5%	65.3%	68.3%	68.4%	66.7%

#### **No Smoking Initiatives**

We are subsidizing the full treatment for employees who stop smoking for three or more months from when they start the no smoking treatment. Six employees have had success in quitting smoking in this initiative which began in 2015.

#### Mental Health

#### Implementation of Stress Checks

We implement stress checks in FY2016 for all our executives and employees have taken stress checks since they were implemented in FY2016 to build an easy to work environment, promote awareness about stress, and maintain mental health after revisions to a portion of the Industrial Safety and Health Law were enacted.

We are improving the workplace in addition to providing opportunities to take and receive advice from mental health experts such as industry doctors for employees who feel stressed and would like to talk with a physician.



Stress diagnosis

#### **Consultation with Industry Mental Health Professionals**

We started once a month consultations with industry doctors who are mental health professionals at our headquarters clinic from April 2016.

#### Implementation of Mental Health Education

We conduct "mental health education," centered on management positions, with the aim of management, maintenance, and improvement of employees' minds and bodies. A total of 60 employees, including new managers, took this education in FY2016.

#### **Initiatives for Diversity**

A corporate climate that allows diverse human resources from senior employees, female employees, or employees who are caring for family to multinational employees to actively participate is indispensable. Shinryo Corporation is furthering enhanced policies and the introduction of flexible working forms to drive skills and promote the ongoing work of diverse human resources.

#### **Actively Participation of Senior Employees**

#### Provision of a Motivating and Active Workplace

Shinryo Corporation is promoting the creation of systems and environments to allow active participation based on skill to have senior employees who have supported the company up until now to continue their efforts. In FY2014, motivation and an evaluation matching that motivation was established through the institutionalization of "Temporary S" to administrate important operations. In October 2015, the system was also added to systems for not only technical employees but also sales, office, and research development staff. Moreover, we have also established a system to allow work at our Group companies up to the age of 70 in addition to reemployment of people up to the age of 65.

We have also revised the salary and bonuses of the policy in April 2016 to be in line with the current skills and job of the individual regardless of their position before retirement to give them even greater presence and work with a sense of responsibility.

#### **Temporary System Matched to Capabilities**

Category	Requirement	Job examples
Temporary S	Persons who able to sufficiently contribute to accomplishments of the company by executing their role as an employee responsible for important corporate operations	On-site project manager who represents the company     Overseas local company president or vice president     Advanced professor
Temporary I	Persons with vast experience and superior expert skills who are able to execute their role as an employee responsible for operations with a high degree of difficult	On-site project manager for large-scale sites or sites with a high degree of technical difficulty     Managers of very difficult projects
Temporary II	Persons who are able to execute operations as an employee responsible for operations	- On-site project manager - Persons who are responsible for projects
Temporary III	Persons other than above	Persons other than above

#### **Holding of Life Plan Seminars**

We are periodically holding life plan seminars every year for 50 and 59 year old employees so they may continue working from a long-term perspective by recognizing the work style and life design after retirement from an early period. These seminars bring a curriculum able to give a

specific image of life in the future from social insurance policies after retirement to methods to manage money in later years through an expert perspective by bringing in labor and social security attorneys and financial planners to explain human resource policies such as pensions and restructuring policies after retirement.

#### **Actively Participation of Female Employees**

Shinryo Corporation aims for a stronger organization by securing diverse human resources, and we strive to build environments female employees can continue working without stress and promote the active participation of female employees.

#### Informational Disclosure Based on the Law to Promote Women in the Workplace

We are disclosing information and action plans through avenues on the Ministry of Health, Labour and Welfare database to promote women in the workplace based on the Law to Promote Women in the Workplace.

#### Shinryo Group Major Consolidated Performance Figures

Ratio of female employees	16.2%
Ratio of female employees in management positions	2.3%

#### **Publishing of Independent Conduct Plan for Female Employees Participation on the Keidanren**

We published our "independent conduct plan related to executive and management appointment of female employees" on the Keidanren Japan Business Federation website.

#### Quantitative goals

- Aim of two times the number of female managers by
- Strengthen employment of female employees by aiming for twice the number of female employees in all within five years and quadruple the number within ten years

#### Qualitative goals

- Establishment of an employee friendly environment by introducing a telecommuting system and a system to extend period of prescribed reduction of working hours
- Implementation of group training such as career development and leadership improvement targeting all female employees and promotion of awareness reform
- Expand awareness of systems and initiatives to empower female employees and efforts to create a corporate culture to promote the active participation of female employees

#### **Diversity Education for Management**

We held the Management Seminar for Female Employee Education for 32 managers that have female employees as subordinates in September 2016. This seminar aimed to teach specific management methods (career paths, support for both work and life events, etc.) to education female employees. Students learned the current state and problems of our company, education through these

problems, and methods for management of female employees through this seminar. We also created a message of encouragement for subordinates at the end of the seminar.



Seminar for management

#### VOICE



Yasumoto Asaka First Sales Department, Tokyo Metropolitan

One of my employees has a three-year old child and is working a reduced work shift. However, my staff and I work every day by talking with everyone in

my section freely about the work style and methodology which will realize the full potential of a staff member who has a l<mark>imited amou</mark>nt of time. Shinryo Corporation still does not have many working mothers right now. As a manager, I would like to build an environment where women can be motivated to work while supporting education methods.

#### Career Design Education for Female Employees

We held the Career Design Seminar for Female Employees for 24 female employees in September 2016. This seminar was held with the purpose to heightening awareness to motivate female employees to continue working and teach methods to achieve a work-life balance. This became an opportunity for female employees to once again think

about their work style and career goals for the next five to ten years by reflecting on themselves through lectures and discussions between participants.



Seminar for female employees

#### **Actively Participation of Foreign Nationals**

An item within Shinryo Corporation's Company Philosophy, "Have leadership, irrespective of education or age" has been translated into English for application overseas, with the addition of "nationality" to "education" and "age." This Company Philosophy forms the basis for action at each of our overseas sites, as in Japan. We believe that making use of a broad range of human resources, crossing the boundaries of nationality and ethnicity, is necessary for us to develop as a global company.

#### Company Philosophy

- Be fair and straightforward
- Do your best with all your effort
- Have leadership, irrespective of education, age, or nationality.

#### 2nd Engineer Group from the Philippines Visit Japan

The lack of human resources in the construction industry will be a grave problem in the future. As one measure to respond to this problem, Shinryo Corporation has been conducting practical education in Japan for engineers from overseas since 2015. In FY2016, ten engineers from SHINRYO (PHILIPPINES) COMPANY, INC. visited Japan. We aim to increase the number of colleagues working together in Japan and overseas through this initiative.



Engineers from SHINRYO (PHILIPPINES) COMPANY, INC, who visited Japan

#### **Local Overseas Staff Japan Invitation Program**

We have held manager training for managers local overseas companies as part of our initiative toward globalization of Shinryo Group. This training was held over four days in June 2016 with the participation of 19 managers from nine countries. In addition to tours of our headquarters and Research and Development Center, we held management training that included our Japan managers.



Training participants



Group work



At Shinryo Corporation, people are considered to be our most valuable asset since our establishment. The techniques, knowledge and experience that all our employees have are indeed our management resources. We have put in place a wide-range of education programs to bring out the highest level of skill from our employees and we are advancing the development of human resources so that executives and employees of any age can work with flexible creativity always with a strong challenging spirit.

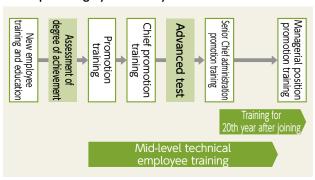
## Implementation of a Wide-variety of Training

#### **Development Training System**

#### **Company-wide Training (Required Training)**

Shinryo Corporation position various group training and internal testing as mandatory education for each level and year of employment with the objective of recognizing the role of employees and increasing knowledge and technology. In addition, we held mid-level technical employee training. We are aiming to strengthen our on-site capabilities by program teaching the expertise of on-site project managers and practical methods of on-site budget management.

#### Oroup training by level and year



#### **Company-Wide Training (Elective Training)**

We implement training to take by selecting external seminars based on official responsibilities / position for mid to higher level employees with the purpose of increasing awareness and skill.

Employees who participated in the training aimed to gain the knowledge and skills required as management. These participants have praised the training with feedback that includes success in learning how to think from a management perspective, learning things they hope to use in figure-based plans in the division they are in charge, and once again recognized how unique the construction industry is through the interaction with the people in other industries who participated.

#### **Training by Department**

We plan and implement practical training systematically as "training by department" by the departments and are linked to "company-wide training" to increase education effect.

#### OMain FY2016 Training by Department

Position	Educational overview	
Technical role	Participating in construction review meetings of site the employee is not in charge of Manufacturer new product study session Education to prevent recurrence of trouble through education materials with case studies of issues	
Market role	Study session of industry trends and strategic management methods	
Administrative role	Presentation session for business role by level	
Common	Symposium beyond class and role for non- management employees	

#### **New Employee Training and Education**

#### Extensive training curriculum

Over the one-year of new employee training and education, we have prepared the perfect curriculum for each technical and administrative employee to build a foundation enabling them to work with confidence right after assignment.

#### ONew employee training and education for FY2016



#### **Training Dormitory Kofu Dormitory**

The overall training and education at Kofu Dormitory for approximately one year is an ongoing tradition at Shinryo Corporation since its founding. As a place of human resource development, employees who enter the company at the same year able to build bonds by living and learning together.





Communication space

Kofu Dormitory



#### Shinryo Group-wide New Employee Training

Shinryo Group is holding new employee training together with all Group companies in Japan. Shinryo Group has companies in a wide range of industries from human resource deployment and system development to hotels in addition to the construction industry. Participants conduct discussions around the theme of "What can be done

toward business expansion through cooperation that goes beyond the barriers of the business category" to bring forth ideas freely and learn the importance of supporting one another as a Group.



Group-wide training at the Research and Development Center

#### **New Employees Overseas Short Term Training System**

We dispatch all of our new employees several people at a time to overseas construction sites. Our employees stay for one-week in the local area to deepen their understanding of working and living overseas by experiencing these sites first hand, and we train our human resources to have a global mindset and a desire to work overseas.





On-site training in Vietnam

Meeting with local staff in Vietnam

#### **Overseas Training System**

Shinryo Corporation pioneered overseas business in the industry in 1972, opened branches and overseas local companies focusing on Asia / Middle East, and has expanded those businesses. In recent years, we are establishing various educational programs to train many human resources able to be actively participate globally.

#### Overseas practical dispatch system

This system is for employees who have worked for the company between four and eight years that have firsthand experience in Japan. Employees selected publicly experience the entire construction cycle on-site at overseas

sites over one to three years. Five people participated in 2015 and three people are planning to participate in 2016. The youthful abilities targeted by the overseas business is trained through practical means.



Shogo Tabata, Tohoku Branch Engineer (PT. SHINRYO INDONESIA practical

#### **VOICE**



Yukari Sakai New Employee (Short-term On-site Training Participant at Thai Shinryo

The training at the cogeneration plant in Thailand was large in both construction applications as well as scale and filled with surprises. I struggled at

the beginning because all of the communication with the local staff was in English. But, thanks to the greatly patient explanations using pictures and other means, I become accustomed to conversations by the end of the training. I was also able to succeed in my goal of actively learning both technologies for the future and language by gaining a clear image of working overseas through this training.

#### **Children Visiting Day**

We held "Children Visiting Day 2016" at the headquarters building in August 2016. A total of 90 children and members of their families participated from throughout Japan. This is the sixth time this initiative has been held since the first event in 2011 for employees to work with pride by understading the work of "fathers" and "mothers" to their families.

The children visited each workplace as a work introduction stamp rally, which deepened their understanding of each division's role while experiencing the atmosphere of the workplace first hand. The children shared their thoughts saying that they were happy to

see their "father's" desk, that the CAD operations looked difficult, and that it was fun to exchange business cards.



Experience operating CAD



Business card exchange with



# Community Involvement and Development

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

## **Relationship with Society**

#### Instructor Activities with Universities

Shinryo Corporation has accepted the opportunity for employees to be part-time instructors in under-graduate and graduate programs. Employees are in charge of classes such as building service and machines as well as engineering systems. We believe in contributing to the growth of technology and the industry by engaging in the education of students who will lead the next generation.

#### OFY2016 Class

Name of University	Classes taught
Tokyo University of Science	Advanced Ventilation Systems
Meijo University	Building Service Engineering 2
Waseda University	Environmental Building Services Drawing
Kumamoto University	Studies on Building Services Planning
Tsukuba University of Technology	Specialized Courses in System Engineering
Tsukuba University of Technology	Eco Environmental Systems

#### **VOICE**



Class environment

Kenichi Tagami Deputy General Manager Design Department, Nagoya Branch

I taught 137 students in Building Service Engineering 2, which is a required subject in the Faculty of Science and Technology, Department

of Architecture at Meijo University. I was passionate about teaching a class that mixed things not written in the text books by utilized the real experience and knowledge I have gained over the last 30 years with focus on a practical level related to building service. I brought in a curriculum that of course covered modern energy-saving technology that plays a role in preventing global warming today, but also allowed students to actually learn equipment design operations by moving them with their own hands rather than just listening to a lecture. Students are serious and enthusiastic, sometimes surprising me with unexpected question. The class progressed in a very fun way with positive students. I think the students learned the importance of building service through my class. I hope to cultivate engineers who can take on the challenges of the world and would like to keep teaching.

#### **Bringing In High School Internships**

In December 2015, we brought in 10th grade students living environment system interns (work experience) from Fujisawa Koka High School in Kanagawa at our Yokohama Branch. The internships were involved in activities over three days such as experience-oriented learning of on-site operations and hands-on creation of design plans to satisfy the requirements of customers in addition to tours of facilities from the heat source machine room and the roof cooling tower at sites to

district heating and cooling systems. We hope this young generation of students learning civil engineering were able to deepen their understanding and interest in the construction industry through this internship.



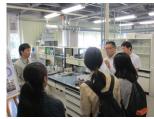
Hands-on design planning

#### Hosting of Let's Tour Technology to Design Air Open office

We held a open office for female students who are interested in the science and engineering field at the Research and Development Center in August 2016. A total of 21 female students participated. The Open Office was sponsored by the Science and Engineering Challenge (Rikochare) that is promoted by the Gender Equality Bureau Cabinet Office. The Open Office was planned to play a role in communicating the fun of science and engineering work and help students consider their future studies and work. This is the second year the Open Office was held.

In addition to explaining technology developed by female employees of Shinryo Corporation, etc., the participants tried operating testing devices. Furthermore, our female employees talked about the reasons they chose science and engineering field and what is attractive about the work at the tea time after the tour. The participants shared their

impressions saying that this was an event to help them think about their future and that they were able to talk freely with the female employees and now have a clearer image of the work.



Shinryo Corporation open office



#### **Connections with Local Communities**

#### Yotsuya Volunteer Clean-up Activities (Headquarters)

Agreeing to a request from the 2-chome, Yotsuya, Shinjuku-ku community youth group, we have continued to participate in a "clean-up activities" in Yotsuya once a month every year since 2004. The number of employees for staffing alternates monthly and, together with the youth group and community, we walk and pick up litter such as cigarette butts and empty cans on the sidewalks and shrubbery around 2-chome, Yotsuya. In addition, new employees even participate in this activity as trainees in April every year. We will continue this activity in the future to show our gratitude to the Yotsuya community who supports us and to remain conscious of ourselves as a company coexisting with the environment.

#### Cooperation with the Fill Yotsuya with Flowers Campaign (Headquarters)

This campaign sets up planters with seedlings raised by third grade students at the Shinjuku Yotsuya Elementary School. We have been cooperating with the Fill Yotsuya with Flowers

Campaign initiative to fill the Yotsuya District with flowers since FY2011. This has become a wonderful opportunity to enjoy the flowers and interact with the children who visit to water the flowers on their way home from school.



Planters placed at the headquarters

#### Volunteer Clean-up Activities Around Takamatsu Warehouses (Air Conditioning Equipment Division)

We are conducting clean-up activities around our warehouse in Takamatsu, Nerima-ku, Tokyo after our morning meeting every Wednesday. This activity began as a way of showing our appreciation to everyone in the local community each day as our warehouse is located in a residential area. We have been doing this for eight years

#### with the cooperation of our partner companies.

#### Volunteer Clean-up Activities Around Nojima Park (Yokohama Branch)

During the vacation in May 2016, we deepened our friendship by having a barbecue for our family gathering with the employees and families of partner companies held by the Yokohama Branch Occupational Health and Safety Council at Nojima Park in Yokohama City. We conducted volunteer clean-up activities around the park where we held the event after fun such as games. This family event, which is held periodically every year, is the second time since last year that we have conducted volunteer clean-

up activities. This year, 113 participants came together for the activity in green ware and further enhanced their awareness of environmental conservation while generating a filling of unity.



Volunteer clean-up activity

#### Clean-up Activities Along Hirose River (Tohoku Branch)

We held clean-up activities along Hirose River which flows through Sendai City in October 2015. We have held these clean-up activities together with an outdoor party, which is a regular event of the Tohoku Branch. Roughly 30 employees and their families walked and picked up trash along the five kilometer road to the site for the outdoor party.





Clean-up Activities and Outdoor Party Along Hirose River

#### Support for Culture and the Arts

Shinryo Corporation engage in support for culture and the arts, through supporting memberships, sponsor ships. In FY2016, we were registered as supporting members for the following music-related organizations. We were also a special sponsor of the Volks Operwien 2016 Japan Performance in May 2016. Through these support activities, we hope we can contribute even a little to the growth of beautiful and rich culture / art.

#### List of music-related organizations for which Shinryo Corporation is registered as a supporting member

NHK Symphony Orchestra, Tokyo / Orchestra Ensemble

Kanazawa / Osaka Symphony Orchestra / Osaka Philharmonic Orchestra / Kanagawa Philharmonic Orchestra / Kansai Philharmonic Orchestra / The Kyushu Symphony Orchestra / Sapporo Symphony Orchestra / New National Theatre, Tokyo / New Japan Philharmonic / Sendai Philharmonic Orchestra / Central Aichi Symphony Orchestra / Tokyo Symphony Orchestra / Tokyo Metropolitan Symphony Orchestra / Tokyo Nikikai Opera Foundation / Tokyo Philharmonic Orchestra / Nagoya Philharmonic Orchestra / The Japan Opera Foundation / Japan Century Symphony Orchestra / Japan Philharmonic Orchestra / Japan Performing Arts Foundation / Hiroshima Symphony Orchestra / Yomiuri Nippon Symphony Orchestra , Tokyo / La Folle Journee au Japon Music Festival 2016

# CSR Activities of Group Companies

Shinryo Group is actively expanding CSR activities at each Group company in Japan and overseas. We are fulfilling our responsibility to society in many forms from initiatives to solve social issues in our main businesses to contributing to communities through volunteer and charity efforts.

#### Initiatives to Reduce Environmental Load

#### **Energy-saving Improvement Proposals in** Renovations

We are actively proposing energy-saving improvements to our customers to contribute to reducing CO2 emissions. We

strive to be able to provide optimal proposals that include equipment downsizing and replacements to highly efficient devices based on the energy data of our customers accumulated through maintenance operations.



# **Diversity Initiatives**

#### Global Staff Actively Utilize Global Staff

We participated in the 19th Global Human Resource Job Fair for foreign exchange students who hope to work in Japan in

June 2016. We registered 10 participants as dispatch staff. These staff are widely active in activities such as interpretation for foreign nationals visiting Japan and customer service at department stores.



Global Human Resource Job Fair

#### Reduction of Environmental Load through **Photovoltaic Power Generation Systems**

We actively work to install Photovoltaic power generation system that contributes to the reduction of CO2 emissions. We have been able to reduce CO<sub>2</sub> by roughly 30,000 tons in FY2016 by installing

photovoltaic power generation system that produce a total of 358,0000 m<sup>2</sup> between FY2010 to FY2016. This is equivalent to the amount of CO<sub>2</sub> absorbed by roughly 2.15 million Japanese cedar trees.



Large-scale photovoltaic power generation systems

#### Akita Castle Hotel

#### **Food Waste Reduction Activities**

We are sponsoring the "ku-be Time" advocated by Akita City. This effort is striving to reduce food waste with an activity to enjoy all of the delicious food you have in the first 30 minutes and last 10 minutes of banquets.



Akita City garbage reduction image character "Ecoa-chan" event POP

#### Risk Management Initiatives

#### **Prepared Emergency Response**

We are working to prepare a contact network, secure engineers, and enhance stockpiles by quickly continuing corporate functions in an emergency so that we may support the recovery of the supply and drainage systems of customers.



Disaster stockpile

#### SYSPRO

#### **Strengthening of Information Security Systems**

As BIM becomes more prevalent, we are reviewing our internal standards for information security policies and strengthening our systems based on requirements for advanced security measures from customers. We are also enhancing security education for our employees.



Implementation of Information Security

#### **Disaster Reconstruction Initiatives**

#### **Ongoing Initiatives for Reconstruction After** the Great East Japan Earthquake

Five years have passed since the Great East Japan Earthquake.

We are continually participating in constructing and renovating pump stations to secure a lifeline and establish torrential rain measures centered upon Miyagi Prefecture as we transition from urgent reconstruction efforts to permanent measures.



Disaster recovery construction of Yuriage rainwater pump station in Natori City, Miyagi Prefecture

#### Initiatives to Improve Labor Practices

#### Secure Operation Safety Through the Use of 3D Laser Measurement

We are using 3D models through 3D laser measurements that it has created to survey the local area before starting renovations.

This technology has contributed to securing the safety of workers and reducing tentative design materials by simplifying the local surveys for work in high places that had conventionally required scaffolding.



3D model using 3D laser measurements

#### **Overseas Initiatives**

#### SHINRYO HONG

#### **Volunteers Supporting People with Hearing Impairments**

We participated as volunteers in the Holiday Farm Day Trip held by the Welfare Association of the Deaf in April 2016. Six of our employees participated and interacted with children who have disabilities through a sweet-making experience.



Sweet-making experience volunteers

#### **Participation in Charity Race**

In December 2015, we participated in the Team Challenge 36, which is the largest charity race held by the Boys' and Girls' Clubs Association of Hong Kong. The participation fees are used to support the education of disadvantaged children.



Employees participating in Team Challenge 36

#### Implementation of Comprehensive Compliance

We implemented compliance education from May to June 2016. We are deepening the comprehensive understanding employees by translating the English Shinryo Group Guidelines to Chinese for education.



Compliance education

#### **Education for Young Engineers**

We are working to educate proficient human resources by continually introducing technical education once in every two month for the purpose of increasing skills of young engineers in air conditioning design and construction engineering.



Duct design education for young

#### Active Participation of Female Employees on Construction Sites

Female employees who make up about 10% of our staff actively participate in a wide-range of positions on construction sites with mostly men. Two of our female employees conduct operations such as on-site patrols and risk prediction activities as safety officers (in charge of safety management).



#### Participation in International District Cooling System Forum

We participated in an international district cooling system forum held in Singapore in May 2016. We learned and exchanged opinions about the latest district cooling technology that is expected as energy-saving technology in Southeast Asia.



Participation in International District Cooling System Forum

#### SHINRYO SINGAPORE

#### **Active Participation of Female** Managers

We are actively promoting the appointment of female employees as managers at Shinryo Singapore. Last year, two new female employees joined the management team. We now have four female managers leading each department.



Promotion ceremony of new female managers (Left: Tracy; Right: Karen)

#### Participation in Japantown Festival

We participated as a CSR sponsor for the Festival for the purpose of revitalizing Little Tokyo Block-M.

We started with clean-up activities in the town the day before the festival and enjoyed the interaction with the local community by carrying the mikoshi shrines while wearing happi coats.



Iapantown Festival

#### Participated in the 3rd Tree Planting in Hanoi, Vietnam

We participated in tree planting activities in the Ba Vì National Park in West Hanoi City, which was held by the AEON Environmental Foundation. The employees who participated gave their impressions that included their pride in being able to contribute in environmental conservation no matter how small.



Participation in Hanoi tree planting



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