

時代にまっすぐ、技術にまじめです。

# Earnings Announcement For the First Half of FY3/20

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November 25, 2019



**Hibiya Engineering, Ltd.**

<Securities code1982>



# **Financial Summary**

## **For the First Half of FY3/20**

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# Financial highlights (consolidated)

- Orders received were about the same as one year earlier
- Sales increased because of progress at large new building projects
- The first half losses were smaller than one year earlier

(Billion yen)

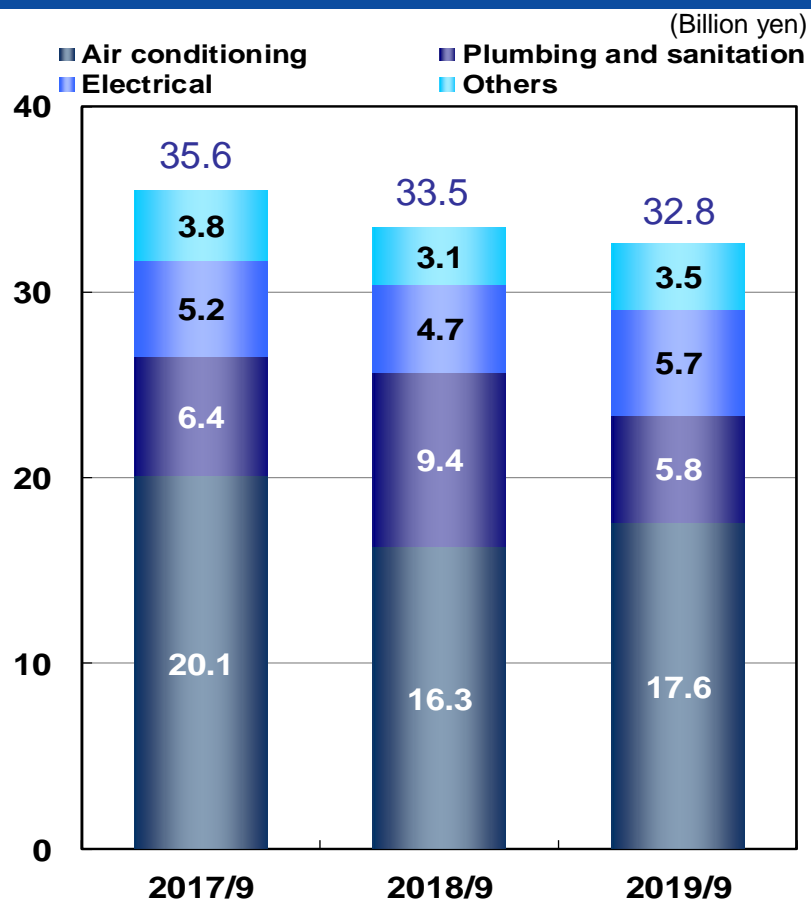
	2017/9 Actual	2018/9 Actual	2019/9 Actual	YoY (%)	2020/3 Plan	Targets of Sixth Medium-term Management Plan
Orders Received	35.65	33.52	32.83	-2.0%	75.0	75.0 ~
Net sales	27.70	26.92	28.57	6.2%	75.0	75.0 ~
Operating Profit	0.70	-1.16	-0.32	—	4.0	4.0 ~
Ordinary Profit	0.91	-1.07	-0.15	—	5.0	5.0 ~
Profit attributable to owners of parent	5.00*	-0.85	-0.14	—	3.0	3.0 ~

\* Including 4.3 billion yen of extraordinary income (gain on sales of investment securities) from sales of the shares of equity method affiliated company Nihon Meccs.

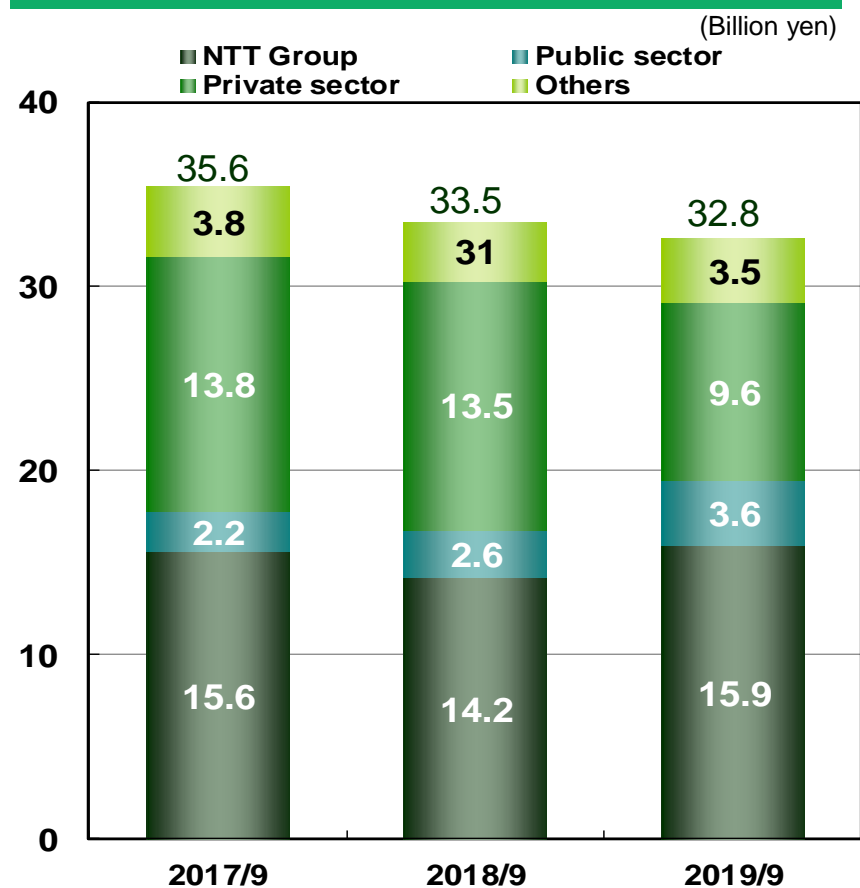
# Orders received by category & by customer (consolidated)

■ NTT Group orders increased and first half orders received remained above ¥30 billion

## By category



## By customer

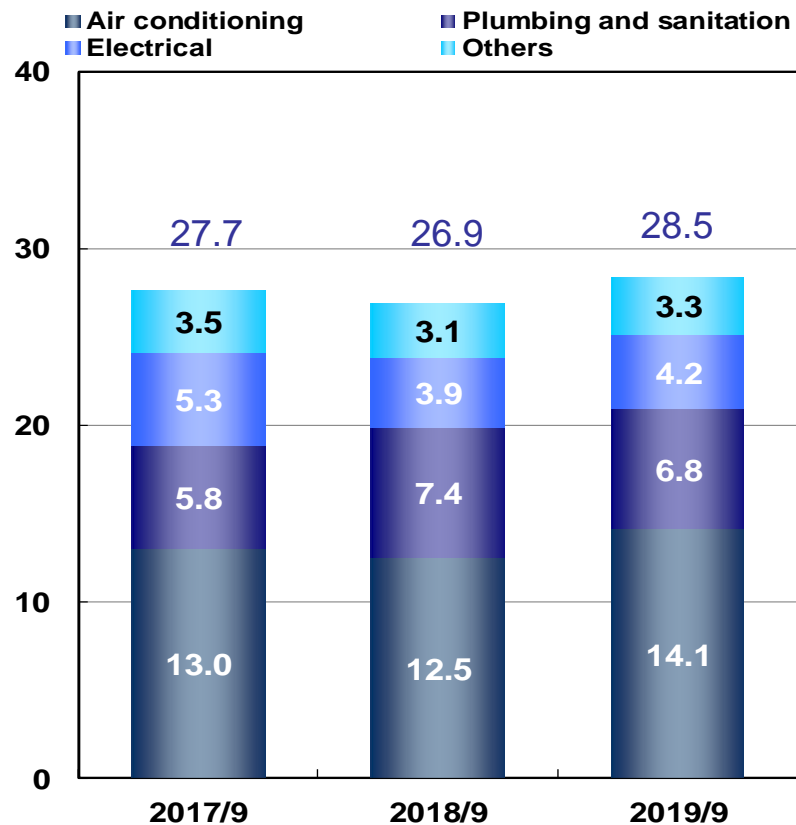


# Sales by category & by customer (consolidated)

- Big increase in private-sector sales, mainly for the construction of new buildings, and higher NTT Group sales
- First half sales were generally in line with the fiscal year plan

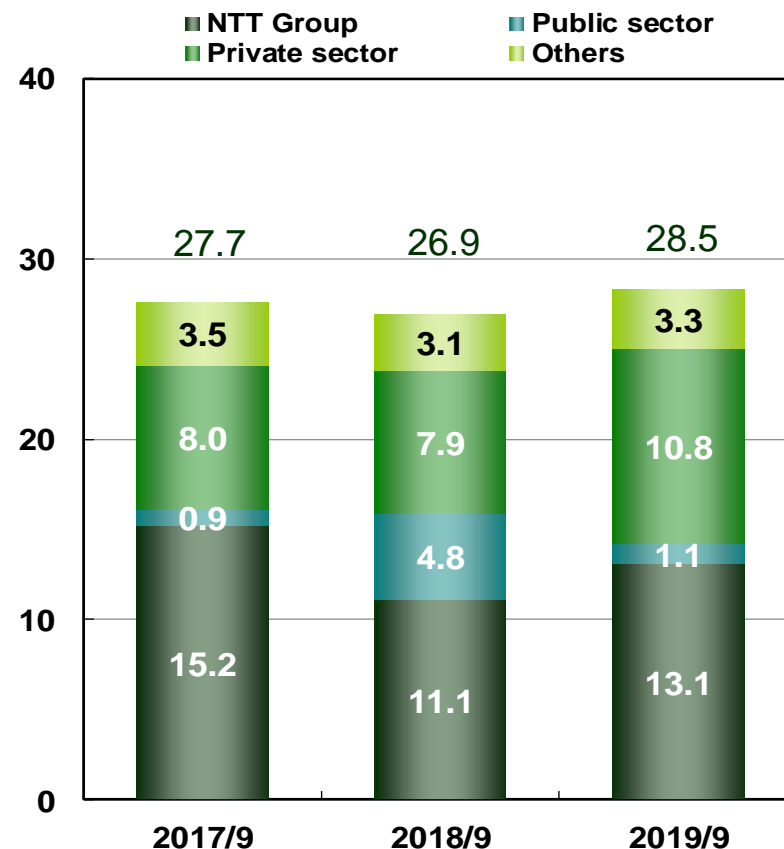
## By category

(Billion yen)



## By customer

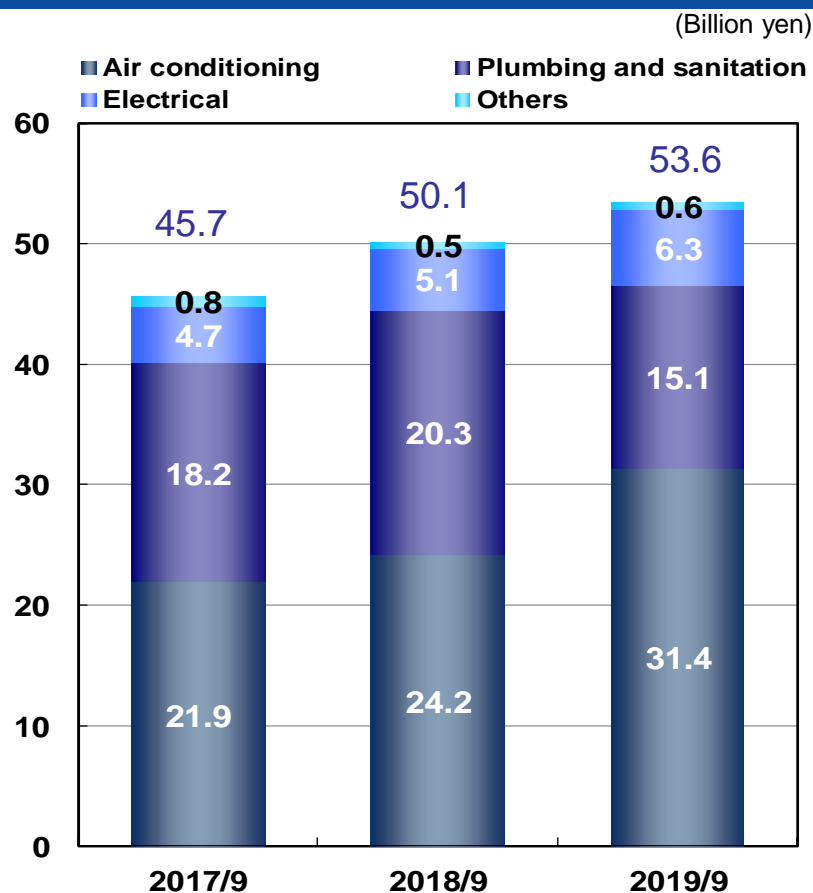
(Billion yen)



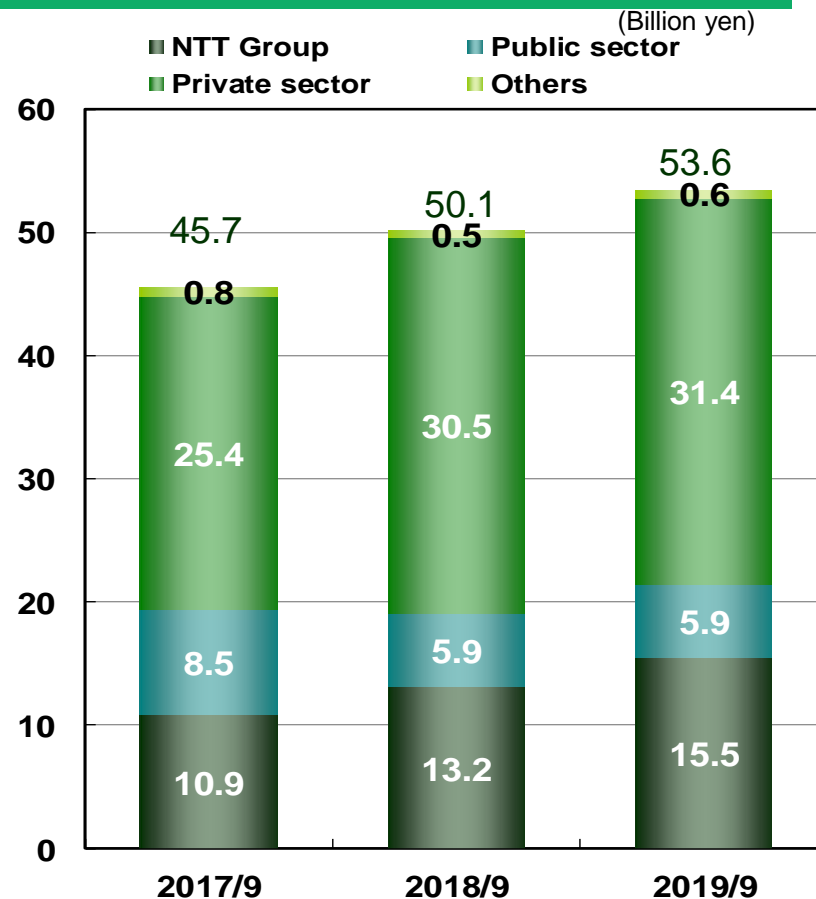
# Order backlog by category & by customer (consolidated)

- The order backlog remains high, mainly for private-sector new building construction projects
- Some of the projects are expected to be completed in and after the second half

## By category



## By customer



## Summary income statements (consolidated)

- The gross profit margin recovered following the decline one year earlier

(Billion yen)

	2017/9 Actual	2018/9 Actual	2019/9 Actual
Net sales	27.70	26.92	28.57
Cost of sales	23.18	24.22	25.08
Gross profit	4.52	2.69	3.49
Gross profit margin	16.3%	10.0%	12.2%
SG&A expenses	3.81	3.85	3.81
Operating profit	0.70	-1.16	-0.32
Non-operating income	0.20	0.09	0.17
Ordinary profit	0.91	-1.07	-0.15
Extraordinary income	4.52	—	-0.03
Income taxes	0.43	-0.21	0.02
Profit attributable to owners of parent	5.00	-0.85	-0.14

	2020/3 Plan	Targets of Sixth Medium-term Management Plan
Net sales	75.0	75.0 ~
Operating profit	75.0	75.0 ~
Ordinary profit	4.0	4.0 ~
Profit attributable to owners of parent (ROE)	5.0 (5.0%)	5.0 ~ (5.0%~)

# Distributions to shareholders

## Basic policy

- Based on the earnings targets of the current medium-term plan, stock will be repurchased in a flexible manner as part of shareholder distributions while continuing to place emphasis on dividends. (Another stock repurchase authorization was approved at the beginning of FY3/20, the ninth consecutive year of stock repurchases.)

## Dividends

### 【FY3/2020】

- Total dividend is ¥80 per share as planned
  - ▶ The interim dividend is ¥40

## Repurchases

### 【FY3/2020】

- To purchase 300,000 shares at a cost of ¥570 million during the fiscal year
  - ▶ 1H Actual: 93,000 shares at ¥177 million  
(31.1% of the plan)





# **Sixth Medium-term Management Plan & Achievement of the First Half**

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The Sixth Medium-term Management Plan: April 2017 - March 2020



# Fundamental goal and core strategies

## Fundamental Goal

“Establish and reinforce corporate reforms”  
for the stable and long-term continuation and advancement of  
business operations

## Core Strategies

Invest in human resources and ICT to  
change how people work

- **Recruiting, training and skill enhancement activities**
  - Recruit the people needed to achieve sustained growth
  - Upgrade all training programs
- **Workforce diversity activities**
  - Implement programs to make greater use of female employees
- **Maintain the proper work-life balance**
  - Establish job site support centers
- **Establish a competitive edge and operate efficiently**
  - Use ICT for more efficient and advanced job site supervision

More advanced life cycle total solutions

- **Expand and upgrade consistent-revenue businesses**
  - Increase opportunities by enlarging the scope of life cycle solutions
- **Cooperation among Hibiya Engineering Group companies**
  - Provide engineering services that combine the capabilities of all group companies
- **Collaborative sales activities with the NTT Group**
  - Expand the solution menu by incorporating the technologies of NTT Group companies
- **Use alliances**
  - Create a broader range of new ideas for customers by using cooperation with business alliance partners

# Achievement in FY3/2020

## Invest in human resources and ICT to change how people work

- Working style reforms

(P9)

- Use ICT to improve efficiency and maintain sound partner company relationships

(P10)

- Use of ICT in the job site for improving efficiency and preventing problems

(P11)

## Working style reforms

### Examples of activities, primarily by the Working Style Reform Working Group

#### Reforms closely linked to the workplace



- Improve productivity and job process efficiency at construction sites
- Support to help employees stay healthy

#### Many types of seminars



Construction industry working style reform seminar



Communication skills training

#### Career Design Project for Women

Create a community of female workers



A discussion group for women



Construction site field trip for women

- Received L Star certification (stage 2) of the Act on the Promotion of Female Participation and Career Advancement in the Workplace



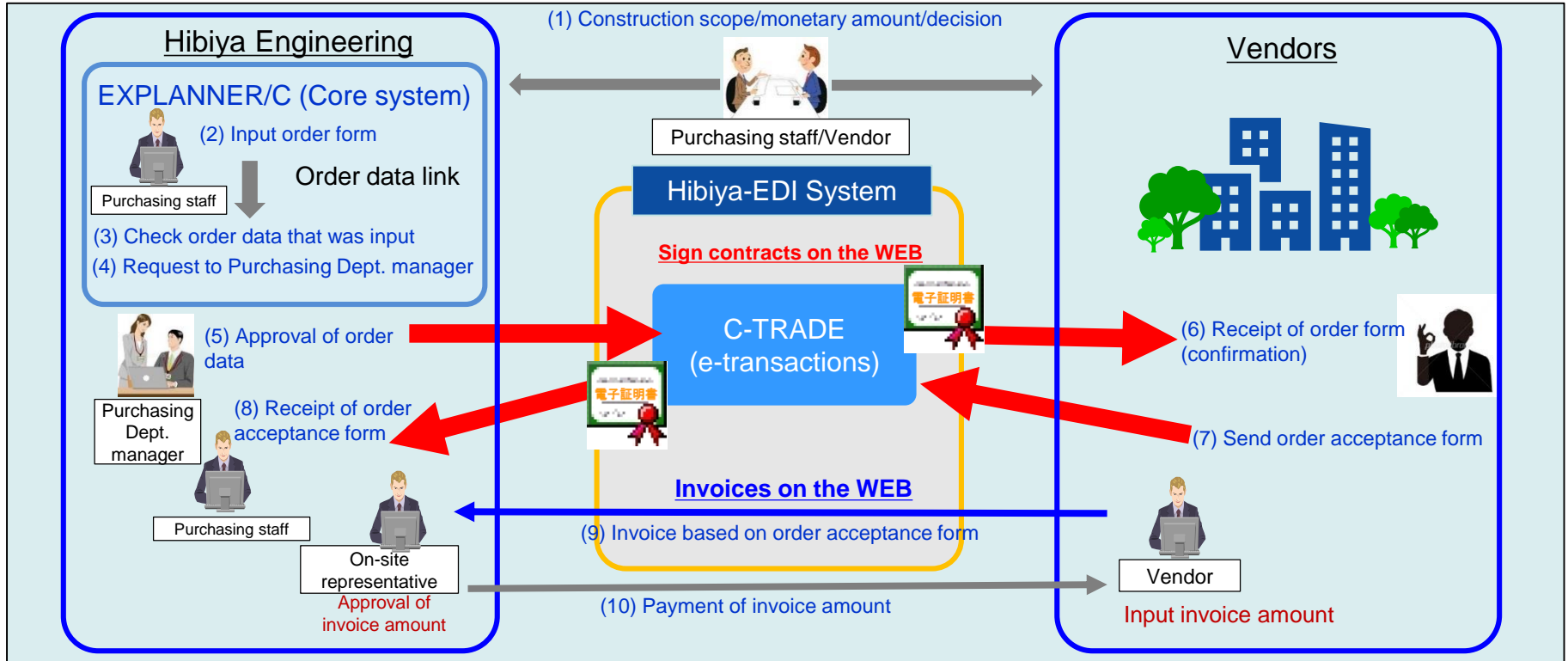
Achieved 4 of the 5 requirements

- ✓ 1. Recruitment
- ✓ 2. Retention
- ✓ 3. Working time and other job characteristics
- 4. Pct. of management personnel
- ✓ 5. Wide range of career paths

- The goal is for women to be at least 20% of newly hired people in accordance with the female empowerment action plan. (Actual pct. is 25.9% during the past three years)

Use ICT to improve efficiency and maintain sound partner company relationships

Advanced Hibiya-EDI System invoices and addition of **WEB order forms**



**Benefits for Hibiya Engineering**

- Improves efficiency by completing contract procedures faster
- Stronger relationships with partner companies
- Strengths compliance, such as by preventing the fraudulent alteration of documents

**Stronger relationships due to greater efficiency**

**Benefits for Vendors**

- Efficient use of personnel due to faster finalization of contracts
- Higher productivity due to a smaller volume of work (seals, documents, etc.)
- Lower cost for stamp tax, delivery fees and other items

# Use of ICT in the job site for improving efficiency and preventing problems

All departments participate in collection of job site information and follow-up to use ICT for boosting efficiency

## Prompt face-to-face confirmations and follow-up for job site progress and decisions

- Construction and procurement managers visit job sites to confirm progress and deal with revisions
- Face-to-face confirmations of the construction framework and partner company status and follow-up actions
- Use of quality advisers and others with many years of construction experience in order to monitor the status of job sites



Face-to-face job site meetings

## Use of schedule management app/chat, etc. to improve efficiency



Share/confirm daily schedules of individuals



Meetings

Construction

Completion

### Easy to set up a meeting with several people



The meeting app

### Procedures using a laser marker



Improves accuracy

### Tablets replace paper drawings and other documents



Faster information sharing by eliminating paper

### Digital data replaces paper documents



The virtual tour manual

- ◆ Speed up information sharing ◆ Apps created for specific needs improve efficiency
- ◆ Shortens working time by making information available to other job sites

## Achievement in FY3/2020

### Activities for providing more advanced life cycle total solutions

- **CO<sub>2</sub> Reduction Initiatives**

(P13)

- **Alliances to meet public sector needs and receive renovation project orders**

(P14)

- **New LC Service Center strengthened consistent-revenue activities and increased orders**

(P15)

# CO<sub>2</sub> Reduction Initiatives

## Use of LED lights at all Nagano prefectural government buildings

The first project by a prefecture in Japan that uses a large-scale bulk lease for many buildings and facilities in order to lower CO<sub>2</sub> emissions

### The Nagano Prefecture LED Light Project

A bulk lease was used to install LED lights at all prefectural government buildings and facilities in order to lower CO<sub>2</sub> emissions.

**【Cost】**

- ▶ About ¥300 million

**【Purpose】**

- ▶ Reduce CO<sub>2</sub> emissions and electricity use at the prefectural government buildings and facilities
- ▶ Use of a lease prevented spikes in expenses

**【Length of project】**

- ▶ July 2018 to September 2019 (LEDs in police stations and boxes)



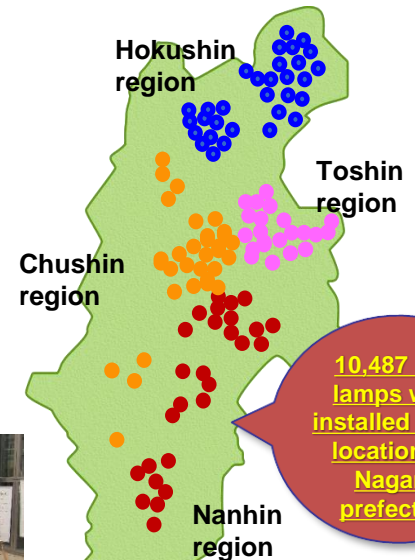
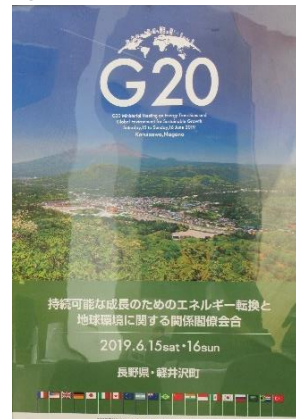
### Participating companies

Organization /financing	Mitsubishi UFJ Lease & Finance Co., Ltd.
Design/installation /inspection	Hibiya Engineering
Design/installation	Six companies in Nagano

### Hibiya Engineering activities

- ▶ Studies, installation work and maintenance services for lowering CO<sub>2</sub> emissions associated with current equipment

Information about the LED project was presented at the G20 Climate Sustainability Working Group meeting that was held in Nagano



Hibiya Engineering plans to use expertise gained from this project to meet the needs of local governments throughout Japan for activities that lower CO<sub>2</sub> emissions.



# Alliances to meet public sector needs and receive renovation project orders

## Self-sufficient and dispersed energy and other equipment for Information Center Manazuru

Information Center Manazuru, Manazuru-machi, Ashigarashimo-gun, Kanagawa



### Needs

Equipment for evacuation site designation based on the Manazuru regional disaster response plan

Upgrade of the current air conditioning system, which is more than 20 years old

Renovations to conserve energy and lower the cost of operating the center

### Proposal to Order Receipt FY2019



Adoption

Update 11 AC units

Installation of electrical equipment for self-sustaining operation

### Proposals

Use of FY2019 subsidy of the Ministry of the Environment

Update the AC to self-sustaining gas heat pump

Increase reliability

FY2018

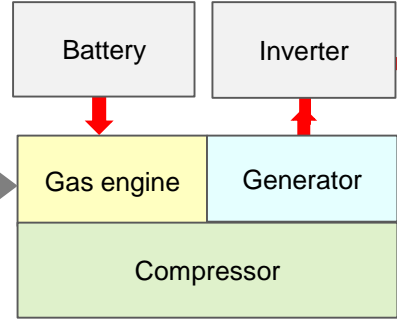
Bulk lease study and project for installation of new equipment

Construction proposal and comprehensive technology assessment including installation work, safety management and other items

### Example of the System

#### Self-sustaining gas heat pump

Battery operation during power fail



Power supply

Fail

Power supply transfer

After power fail switch to battery

Indoor unit Lights

Turn on self-sustaining switch after power fail

Construction consultant (Design, supervision, etc.)



Hibiya Engineering (Oversight, construction)

### Expected benefits

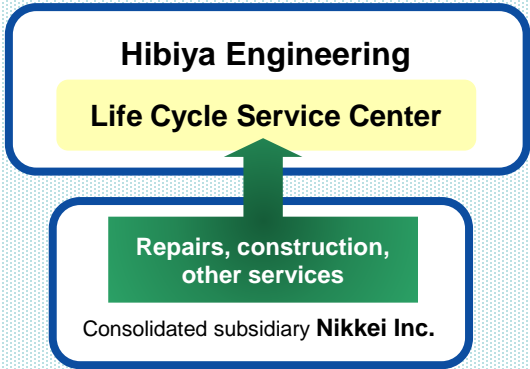
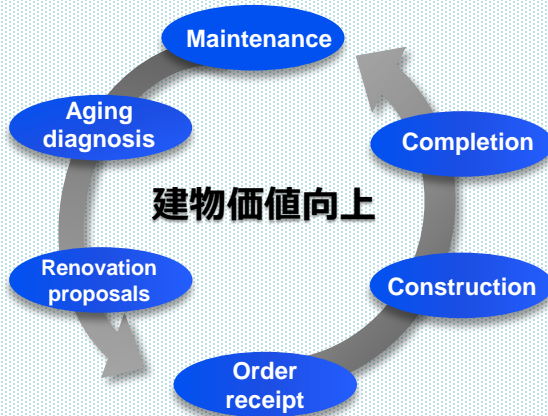
- ◆ Reduction in greenhouse gas emissions (CO<sub>2</sub>)
- ◆ Lights, AC and other equipment at evacuation sites function even after a disaster

# New LC Service Center strengthened consistent-revenue activities and increased orders

## Expanded Life Cycle Service Center contributed to growth in renovation projects

### November 2018

- Established the LC Service Center
- Handles all post-completion services



- Reinforced service infrastructure makes repair/maintenance services the entry point for creating renovation proposals
- More efficient post-completion services by LC service center

**A thorough service infrastructure for one-stop support from completion to renovations and upgrades**

**Hibiya Engineering**

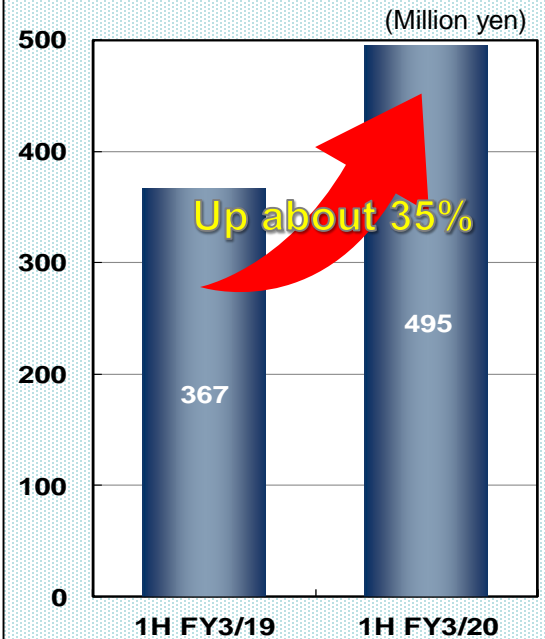
**Life Cycle Service Center**

- More powerful framework for services
- Uses repairs/inspections to quickly gather information and create renovation proposals
- Improvement in efficiency
- A single contact for all customer calls results in faster responses (new e-mail address for calls and other measures)
- Use of tablets
- A single server also used by partner companies, smaller risk of information leaks, and other measures

### Growth of LC Services in 1H FY3/20

- Number of buildings receiving LC services and orders for construction work for tenants increased

**Increase in orders for post-completion services from Gold Customer S**



\* Consolidated orders

# Major completed projects

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# More advanced life cycle total solutions (Orders received by priority domains)

## 【Priority Domains】

Data centers  
/Information

Office buildings

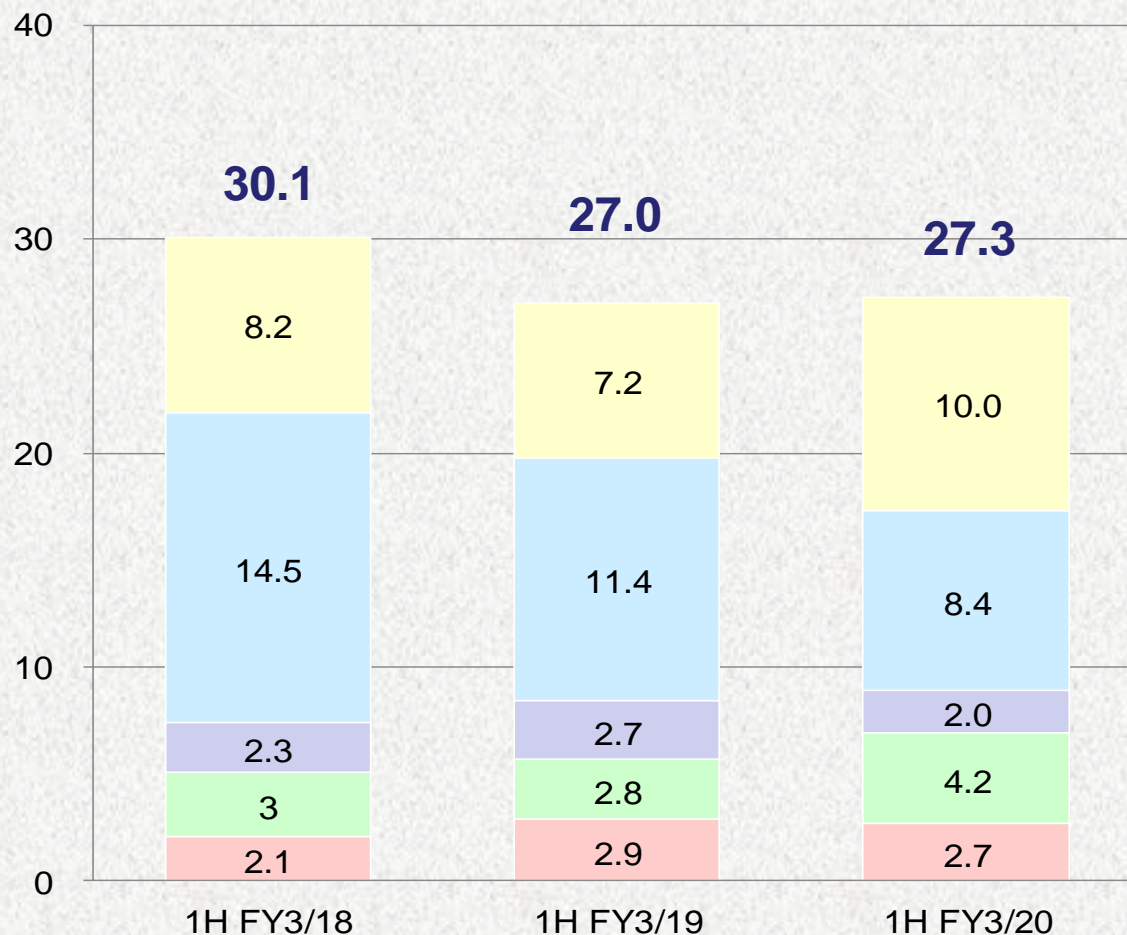
Manufacturing  
/Distribution

Health care  
/Medical Welfare

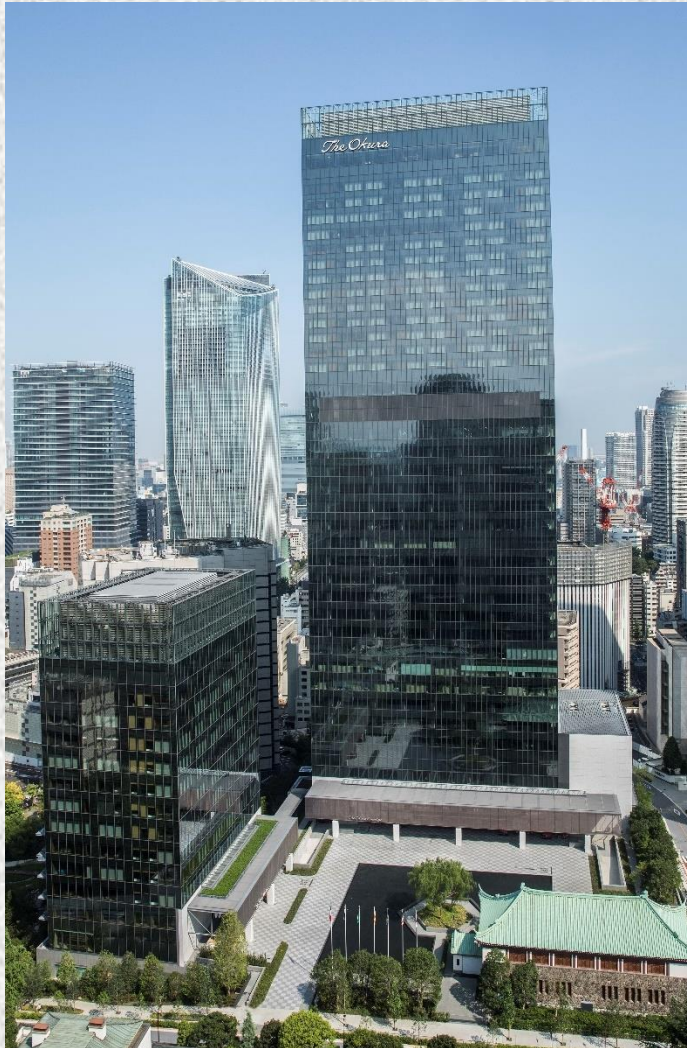
Hotels/Resorts

## 【Orders received (non-consolidated)】

(Billion yen)



# Hotel

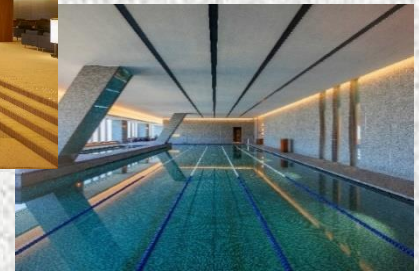


**Faithful restoration of the main lobby of The Okura Tokyo, including lights incorporating the famous Okura lantern motif that is a symbol is this historic hotel.**

The Okura opened in 1962 as a hotel featuring a distinctly Japanese design and atmosphere rather than a format based on overseas hotels. The recent renovation carries on this tradition and takes the design to an even higher level.



Lobby



Okura Fitness &amp; Spa

The Okura Tokyo	
Location	Minato-ku, Tokyo
Floor area	180,905 sq. meters
Structure	41 stories above ground/1 stories below ground/2 levels of roof
Hibiya's work	Sanitation

## Hotel/Multipurpose Building

"Jingu Gaien no Mori" is a vacation home that provides a front seat to the greenery, views and excitement of the city.



<b>Mitsui Garden Hotel Jingugaien Tokyo Premier</b>	
<b>Location</b>	<b>Shinjuku-ku, Tokyo</b>
<b>Floor area</b>	<b>15,800 sq. meters</b>
<b>Structure</b>	<b>13 stories above ground</b>
<b>Hibiya's work</b>	<b>Air conditioning</b>

A spectacular tower in the heart of Tokyo's vibrant Shibuya district with offices, shops, restaurants and event spaces



<b>Shibuya Scramble Square (East tower)</b>	
<b>Location</b>	<b>Shibuya-ku</b>
<b>Floor area</b>	<b>181,000 sq. meters</b>
<b>Structure</b>	<b>47 stories above ground/7 stories below ground</b>
<b>Hibiya's work</b>	<b>Air conditioning/sanitation</b>

## Office/Other building

The head office of Nippon Thompson, a manufacturer of bearings



**The head office of Nippon Thompson**

<b>Location</b>	<b>Minato-ku, Tokyo</b>
<b>Floor area</b>	<b>5,230 sq. meters</b>
<b>Structure</b>	<b>8 stories above ground</b>
<b>Hibiya's work</b>	<b>Air conditioning/sanitation</b>

A base for research and development with the goal of helping people enjoy long and healthy lives



**Kobe International Lifestyle Medical Center of Air Water Inc.**

<b>Location</b>	<b>Kobe-city, Hyogo</b>
<b>Floor area</b>	<b>5,554 sq. meters</b>
<b>Structure</b>	<b>5 stories above ground</b>
<b>Hibiya's work</b>	<b>Air conditioning</b>

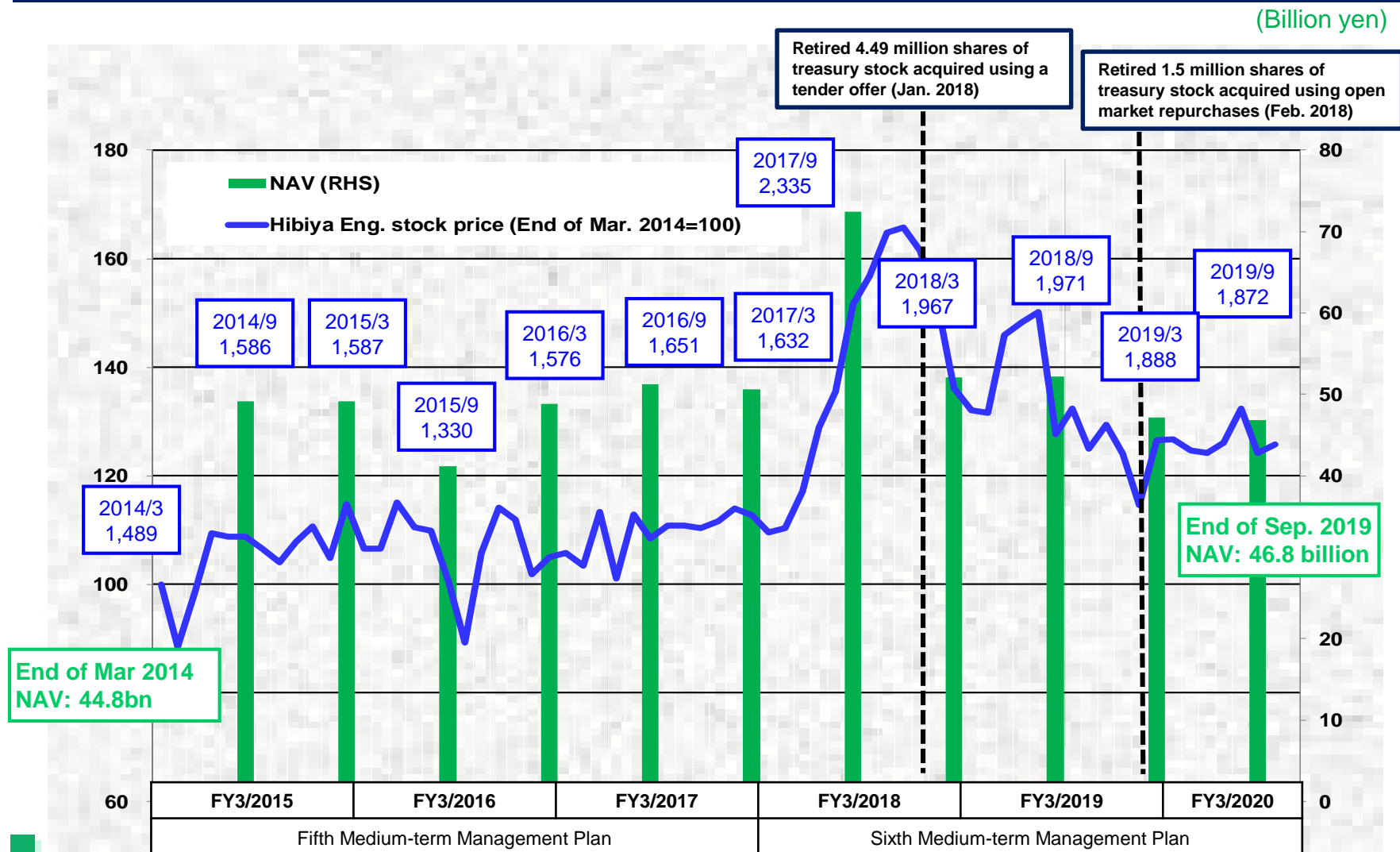
# Reference

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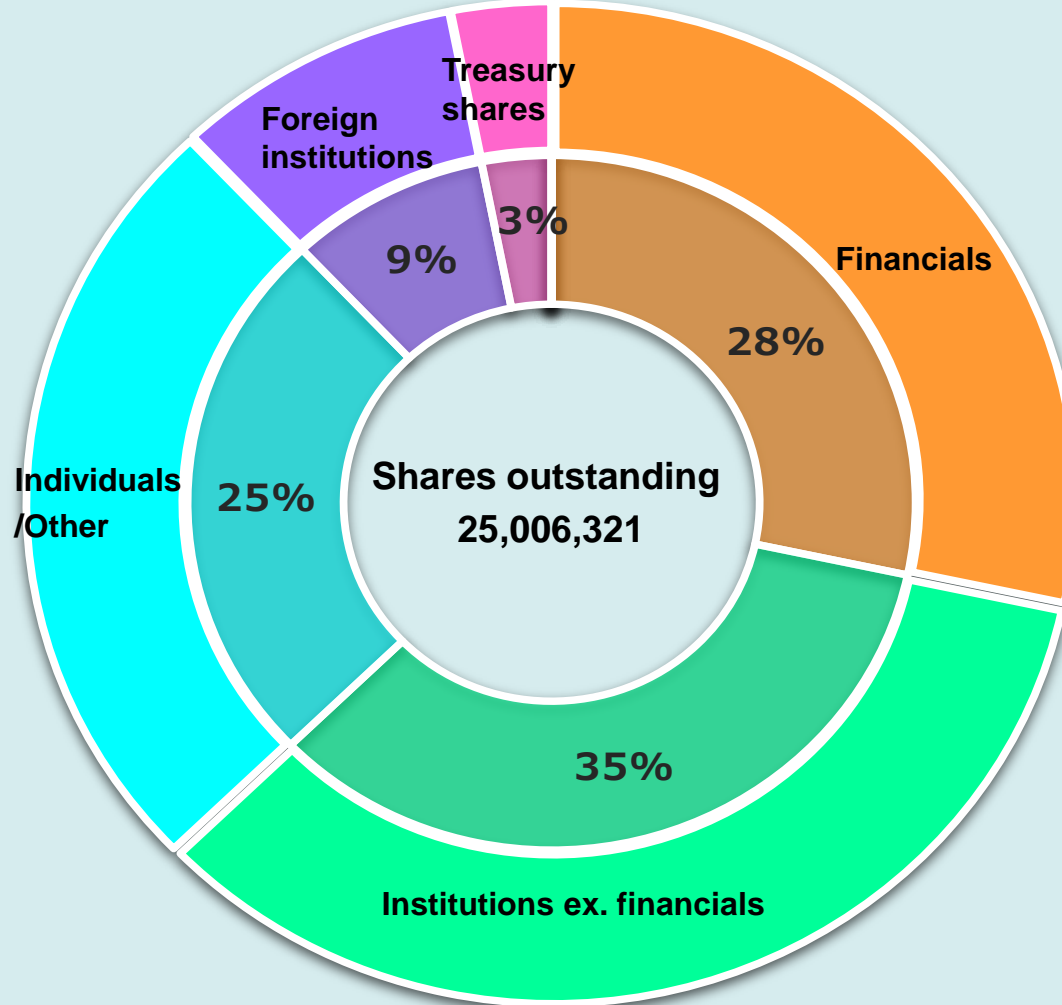
# Stock price and net asset value (~ end of September 2019)

## Performance of Hibiya Engineering stock since the end of March 2014



## Shareholders

No. of shareholders: 3,131 Shares outstanding: 25,006,321



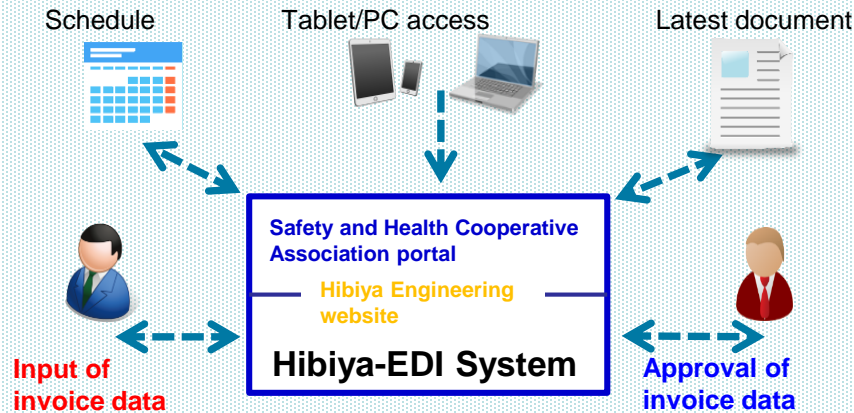
## More efficient cooperation with partner companies, etc.

### More efficient cooperation and more communication strengthens ties with partner companies

#### Use of the Hibiya Engineering website

A unified health and safety portal site where partner companies can obtain all the information they need

Provision of up-to-date information improves efficiency and prevents returns of outdated information



#### The Hibiya-EDI System allows internet processing of invoices

\* Higher efficiency – Eliminates the need for postal mail or hand delivery for invoices. Less time needed for processing and confirmations.

#### Stronger ties with partner companies The Hibiya Meister Program



A Hibiya Meister ceremony

34 Meisters were certified in FY3/20



The Hibiya Meister seal

- Recognizes outstanding skills and provides people needed at job sites
- Increases salaries and motivation

#### Hibiya Eng. & Partner company discussion groups and joint training sessions



Group discussion with partner companies



Zero claim workshop

# Seminars at the Hibiya Information Plaza

## Facility Management Seminar



### Summary

The importance of facility management is growing steadily. This seminar explained the value created by facility management from many perspectives. Presentations also covered working style reforms, sustainability, wellness, building information modeling (BIM) and other related subjects.

### Presentations

- Opening presentation – The basics and case studies to illustrate the enjoyment of facility management
- Facility data management by combining BIM and facility management
- Utilization of facility management digital technology and maintenance data
- The workplace survey, a facility management evaluation tool for offices

## Utilization of the IoT and artificial intelligence



### Summary

Information about how companies are making use of technologies involving the Internet of things and artificial intelligence

### Presentations

- EXBeacon and other technologies for the use of digital twins
- The DBMCS building automation solution for using open systems to support the IoT
- The DiAs energy conservation navigation system using AI
- Examples of community creation and smart community activities

# Natural gas cogeneration system

A local gov't used a Hibiya natural gas cogeneration system at a hot spring lodge

Previously unused energy is utilized to cut the cost of electricity by 60%, which lower CO<sub>2</sub> emissions

## City of Shimada

A place where people/industry/culture come together  
A healthy city of water and greenery

+ Goal is also to be a leader in the field of reusable energy

### Issue at city's hot spring facility

Natural gas produced by the hot spring, containing 86% methane, **was released to the atmosphere**

Idea and execution

Lowers CO<sub>2</sub> emissions

Hibiya technologies/expertise  
Use natural gas cogeneration to produce electricity and use exhaust heat

## Kawane Hot Spring

Hotel and bathing facility

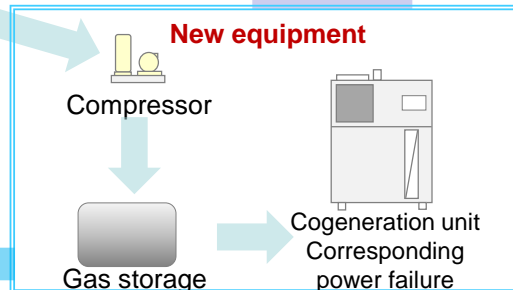
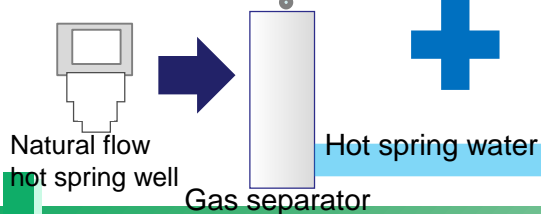
For the lodge (100kW)

For spa hot water (155kW)

Electricity

Heat

Methane's greenhouse effect is more than 20 times higher than for CO<sub>2</sub>



Hot spring water

# Aisle Capping for Small Computers for Data Centers

A flexible aisle capping system for small computer rooms

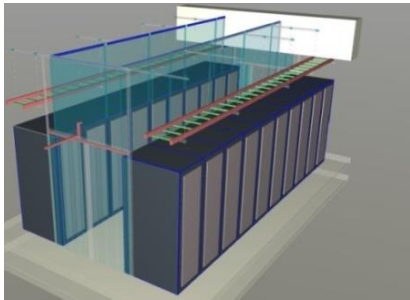
## Features

**More efficient climate control**  
Uniform temperature of rack air supply surface

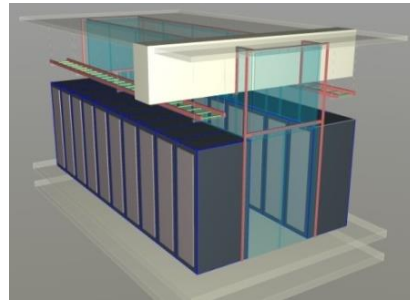
**Flexible installation to match environment for equipment**

**Low cost by using general-purpose sheets**

### Potential applications



Capping with ceiling



Capping with no ceiling

### Capping in use



Installed under a ceiling beam



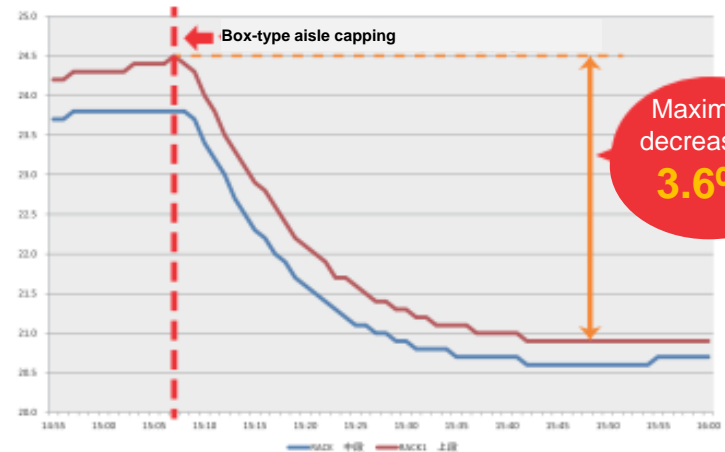
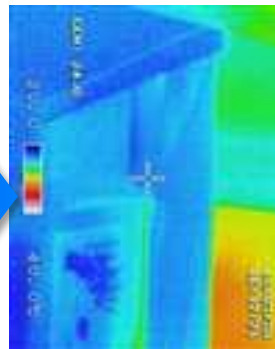
Box-type capping

### Benefits



**2.2°C decrease in temperature**

Improvement in air supply surface allows a more energy efficient thermostat setting for the climate control system



## 3D Scanners

Use state-of-the-art technology (3D scanners) for more technological advances

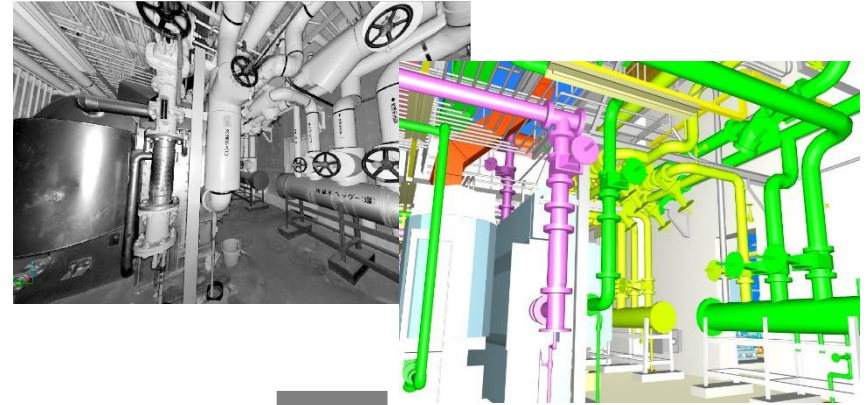


A Faro Focus3D high-speed 3D laser scanner

【Use 3D scanners】

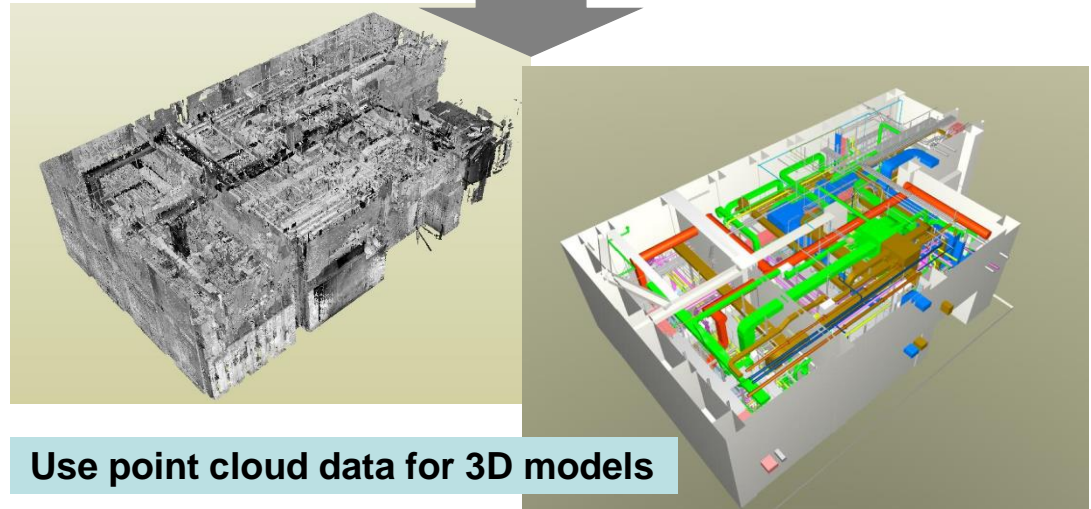
Acquire project site data

Transform image data to CAD



【Advantages】

- Reduces number of people and time needed to perform jobsite surveys
- Improves the safety of jobsite surveys
- Increases the accuracy of construction drawings
- Produces CAD and 3D models quickly



Use point cloud data for 3D models

Utilizing this technique as much as possible as a renovation technology

## 3D Scanner utilization (Kumamoto Teishin Hospital)

Stored building records of the former Kumamoto Teishin Hospital (designed by Mamoru Yamada, an engineer of the former Ministry of Communication)



Record the building data using 3D scanner

### Building data



Photo of the building



Point cloud data captured by the scanner




# Streamlining construction and installation technologies

Labor-saving method for installing rooftop equipment raises efficiency

## Simple installation with single unit package for exterior equipment


**Improves quality**



**A single unit for exterior equipment/base /refrigerant pipes**

- Smaller amount of labor required
- Better, more uniform quality due to fabrication at a factory


**More efficient**



**One rooftop placement using a crane**

- No need for placing separate units

**Less labor**




**Simple rooftop installation**


- No time-consuming installation steps

## Installation of pre-assembled rooftop water tank

**Improves safety**



**More efficient**



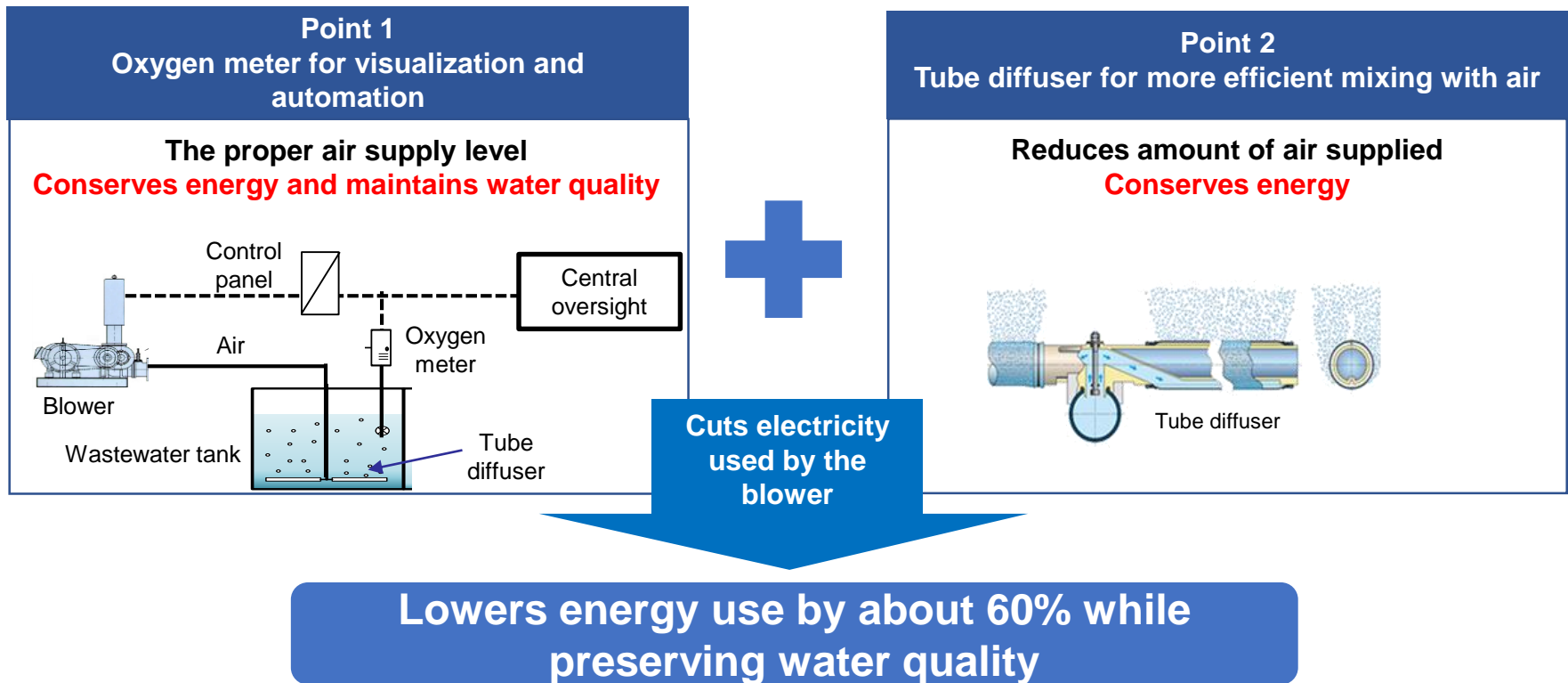
- Reduces the need for performing work in high places (safety)
- Reduces scaffolding, the need for protective plastic coverings of adjacent areas, and crane use (efficiency)

# Energy conservation technologies for sanitation equipment

## Energy conservation and water quality at wastewater treatment facilities

Energy-efficient climate control and electrical equipment as well as a focus on conserving energy in sanitation equipment

- Wastewater treatment facilities
- Requires the supply of an enormous volume of air at a steady rate
  - Required amount of air changes depending on day of the week and time of day
  - Too much or too little air causes water quality to decline

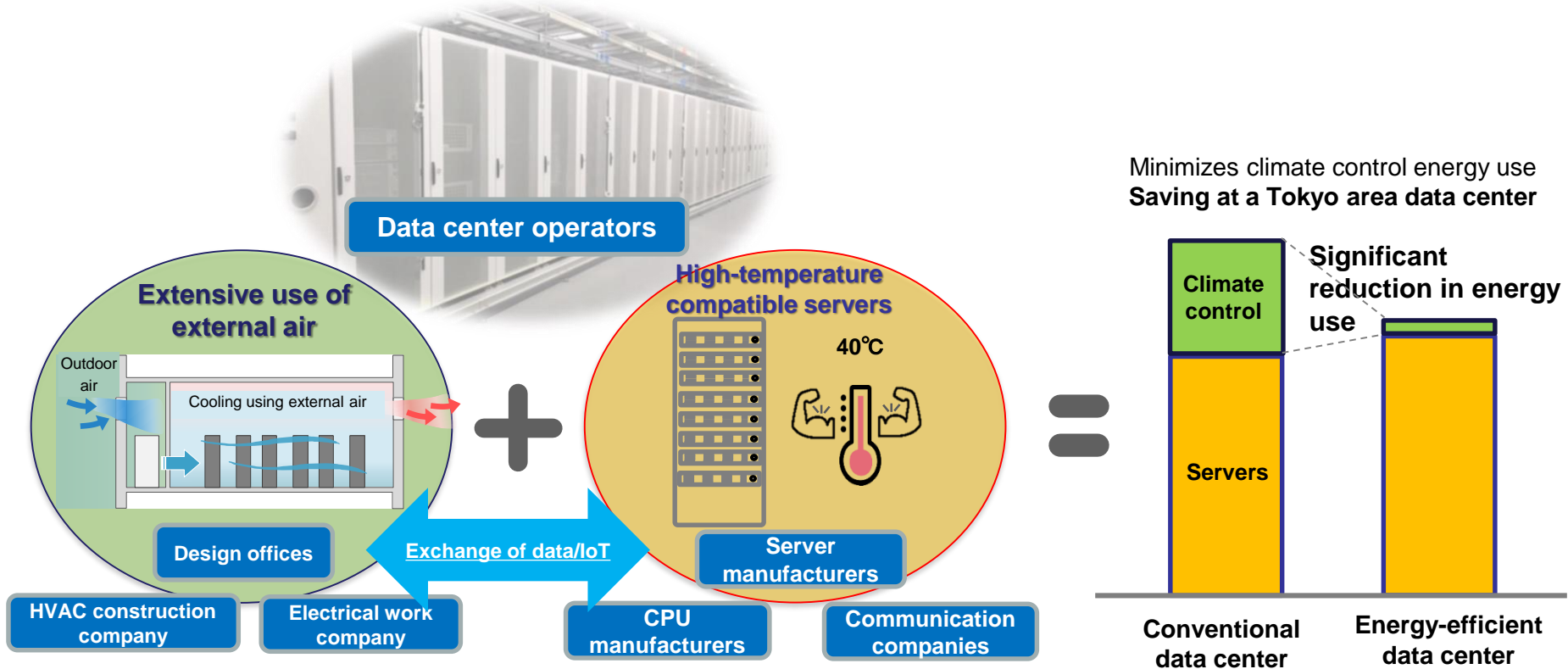


# Minimizing energy use of a data center climate control system

## Activities for creating an energy-efficient data center for NTT Data Corporation

### Used for HVAC equipment control by server internal sensors

- Data links incorporating the IoT overcome barriers between ICT equipment management and facility management
- Conventional temperature sensors do not monitor the internal temperature of servers, which is what must be held down  
 ⇒ Using data from sensors inside servers for climate control makes it possible to control temperatures in the most important locations



# Services and technologies of Hibiya Engineering group

Hibiya Tsusho Trading company

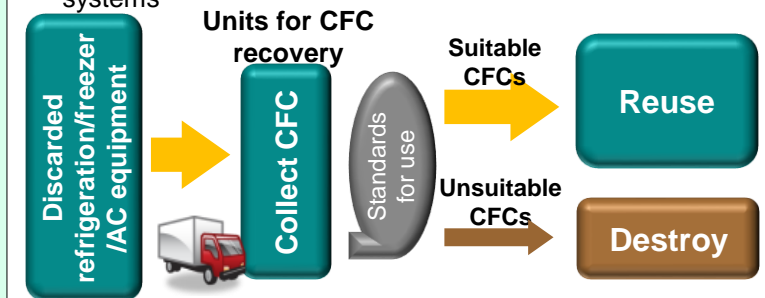
## Reuse of recovered chlorofluorocarbons (CFCs)

### Highlights of processing CFCs for reuse

- ◆ Little energy needed for reuse of CFCs
- ◆ Minimal release of CO<sub>2</sub> during processing
- ◆ Processing produces little industrial waste
- ◆ Recovered CFCs can be used effectively
- ◆ Less expensive than destroying CFCs

### Processing of recovered CFCs and reuse

- ◎ CFCs collected from refrigeration/freezer/air conditioning equipment and converted to a CFC gas by a recovery system
- ◎ The gas is reused mainly by using it to refill air conditioning systems



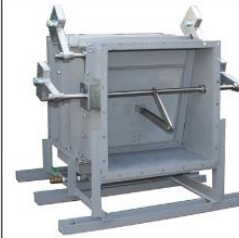
CO<sub>2</sub> emissions from the reuse of CFCs are only 1/12 of emissions from CFC destruction

Source: Refrigerant Collection and Processing Technologies (published by Refrigerant Collection Promotion and Technology Center)

Nikkei Manufacturer

## Manufacture of equipment, disaster response units, etc.

### Water cutoff damper



- ◆ Prevents rainwater from entering through ducts during a downpour or flood

### Access control system (NASCA)

- ◆ Can be linked with card reader, biometrics and other various systems



**時代にまっすぐ、技術にまじめです。**

## **Earnings Announcement For the First Half of FY3/20**

 **Hibiya Engineering, Ltd.**

November 25, 2019