

時代にまっすぐ、技術にまじめです。

# Earnings Announcement FY3/18

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May 25, 2018



**Hibiya Engineering, Ltd.**

<Securities code1982>



# **Financial Summary**

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# Financial highlights (consolidated)

- Orders received were less than planned but remained above ¥70 billion
- Sales were well below the plan due to large projects requiring a long time to complete

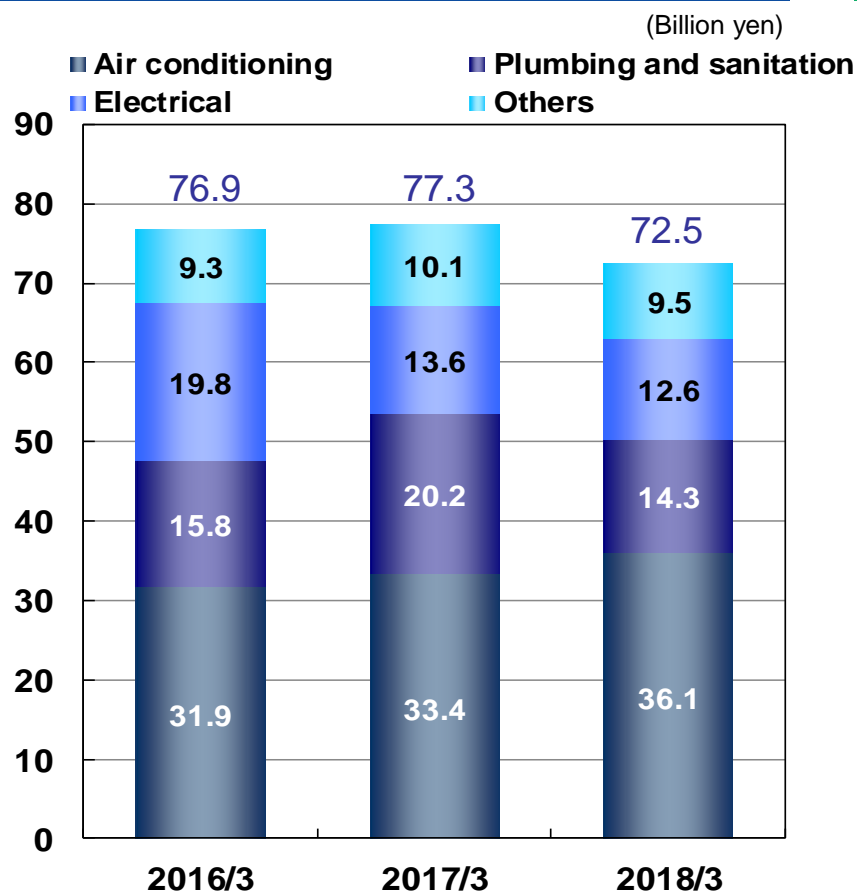
(Billion yen)

	2016/3 Actual	2017/3 Actual	2018/3 Actual	YoY (%)	2018/3 Plan	Targets of 6th Medium-term Management Plan
Orders Received	76.9	77.3	72.5	-6.2%	75.0	75.0 ~
Net sales	79.4	78.3	66.8	-14.7%	75.0	75.0 ~
Operating Profit	4.6	5.6	3.1	-43.5%	4.0	4.0 ~
Ordinary Profit	6.3	6.9	4.0	-1.3%	5.0	5.0 ~
Profit attributable to owners of parent (ROE)	4.6 (8.1%)	5.2 (8.8%)	7.2 (12.3%)	39.7%	7.3	3.0 ~ (5.0%~)

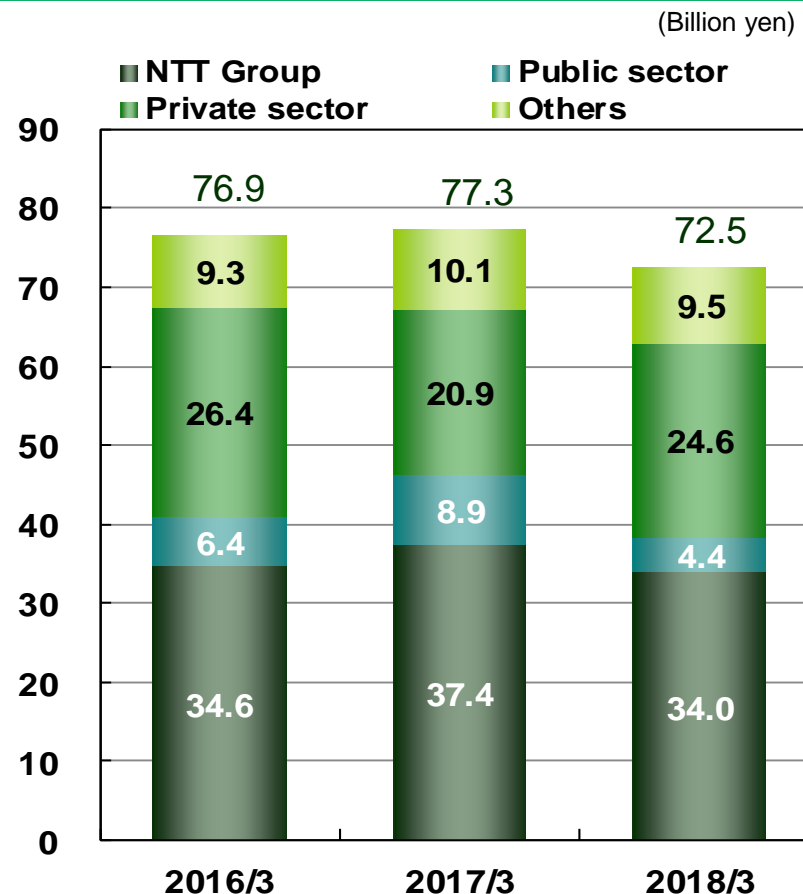
# Orders received by category & by customer (consolidated)

■ Private-sector orders up due to the receipt of large orders; public-sector orders decreased

## By category



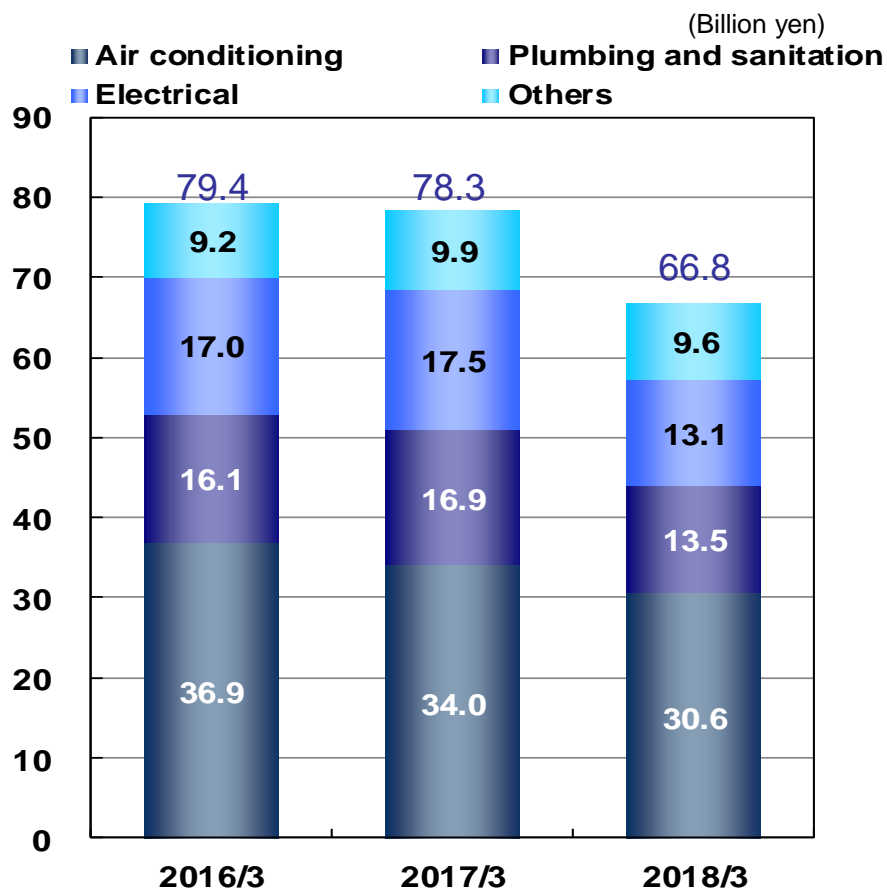
## By customer



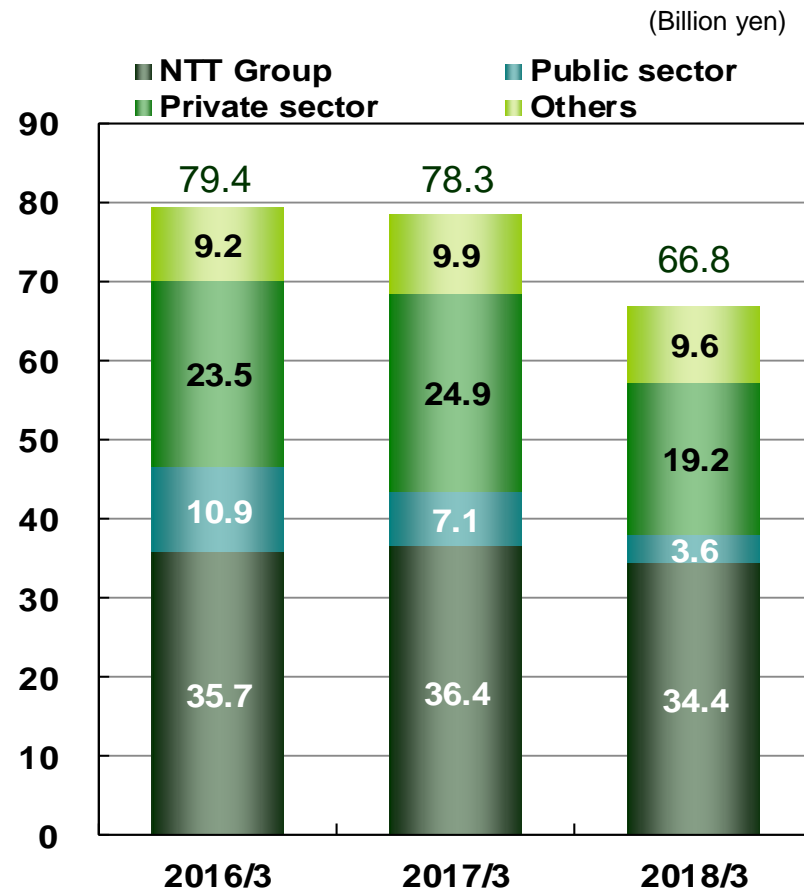
# Sales by category & by customer (consolidated)

■ Private-sector sales down because of increase in large projects carried over to FY3/19

## By category



## By customer



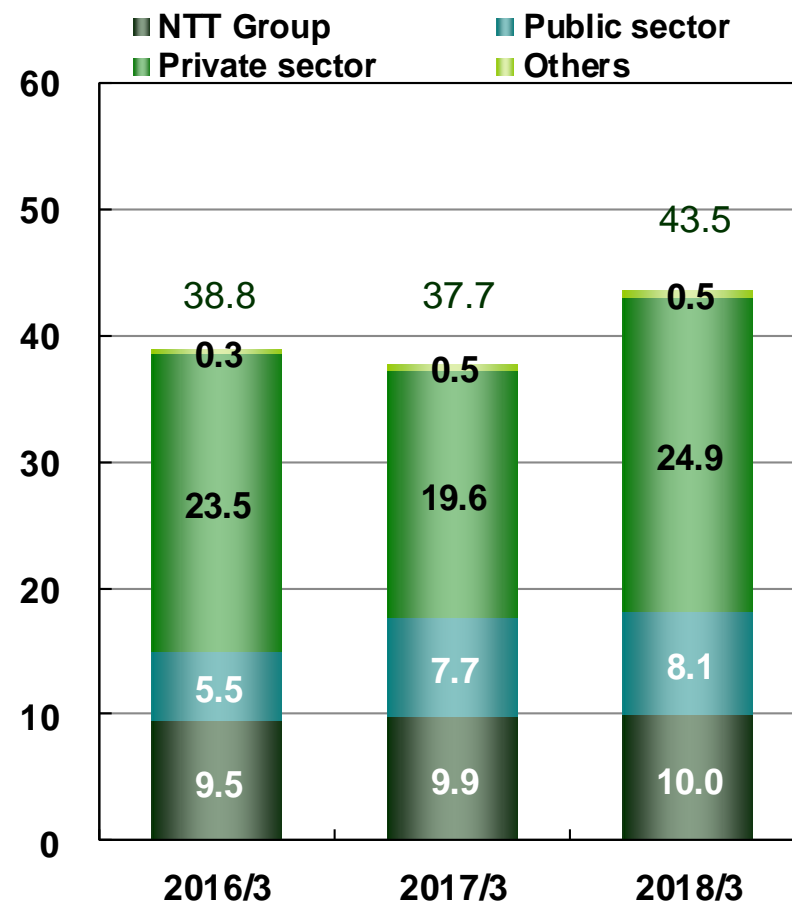
# Major completed projects and projects carried over

## Completed projects

Category	Project
Private sector	G-BASE Tamachi (Shiba 5-chome project)
	Sumitomo Fudosan Onarimon Tower (Shiba-Koen 1-chome Building project (tentative name))
	Construction of New Kyoto Postal Processing Center (tentative name)
	GLP Suita Project
	Construction of building for the Otani University Main Campus Construction Plan (tentative name)
	Sapporo Hokuto High School reconstruction
	Fujita Health University new building B
	St. Catherine's Hospital (Chuo-ku Harumi 3-chome C2 building (tentative name))
NTT Group	Construction of rooms for individual companies in Tokyo No.8 DC East wing 2F south (air conditioning)
	UN Otemachi RN floor 19, 20 and others

## Projects carried over

(Billion yen)



## Summary income statements (consolidated)

■ Life cycle total solution sales activities and rigorous cost-cutting measures including ICT, kept the gross profit margin steady.

(Billion yen)

	2016/3 Actual	2017/3 Actual	2018/3 Actual
Net sales	79.4	78.3	66.8
Cost of sales	67.1	64.3	55.9
Gross profit (GP margin)	12.2 (15.5%)	14.0 (17.9%)	10.9 (16.3%)
SG&A expenses	7.6	8.4	7.7
Operating profit	4.6	5.6	3.1
Non-operating income	1.7	1.3	0.9
Ordinary profit	6.3	6.9	4.0
Extraordinary income	0.4	0.2	4.5
Income taxes	2.1	1.8	1.2
Profit attributable to owners of parent	4.6	5.2	7.2

# Distributions to shareholders

## FY 3/2018

### 【Dividends】

- Based on the Sixth Medium-term Management Plan earnings target, the plan is to pay a **FY3/18 dividend per share of ¥60**

### 【Repurchases】

- Plan was to purchase 500,000 shares at a cost of ¥850 million  
During FY3/18, conducted a tender offer for part of major shareholder stock. **for the purpose of enabling Hibiya Engineering to increase the return of earnings to shareholders and use capital more efficiently**  
(purchased 4.49 million shares at a cost of ¥11.0 billion and retired all of these shares)

## Plan for FY 3/2019

### 【Basic policy】

- Continue distributing earnings to shareholders based on the earnings goal of the Sixth Medium-term Management Plan as well as **place even more emphasis on dividends for shareholders.**

### 【Dividends】

- The dividend will be increased from ¥60 for FY3/18 to **¥80 for FY3/19.**

### 【Repurchases】

- Following the large repurchase of stock in FY3/18, the plan is to **purchase 300,000 shares at a cost of ¥660 million.**





# **Sixth Medium-term Management Plan and Achievement**

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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
- Workforce diversity activities
- Maintain the proper work-life balance
- Establish a competitive edge and operate efficiently

**More advanced life cycle total solutions**

- Expand and upgrade consistent-revenue businesses
- Cooperation among Hibiya Engineering Group companies
- Collaborative sales activities with the NTT Group
- Use alliances

# Achievement in FY3/2018

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

- Use of tablets cloud service for construction management  
(Initiative 1)
- Establish a job site support centers  
(Initiative 2)
- Use virtual tour manuals for less labor and higher efficiency  
(Initiative 3)
- Use ICT for business process reforms and stronger management  
(Initiative 4)

# Job site supervision using tablets with the cloud service (Initiative 1)

- No need for paper documents at job sites

All required documents are accessible at any time



Using paper



Using a tablet

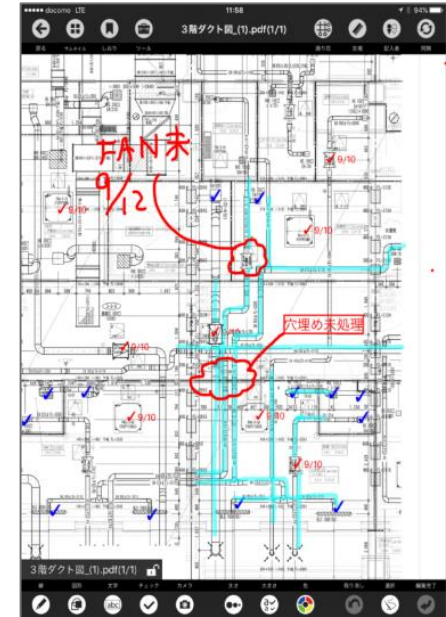


Diagram confirmation using the cloud service

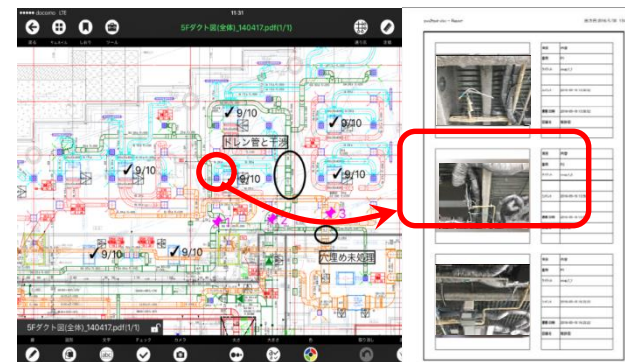
- More advanced oversight of project progress

- Allows job site checks using the latest design information that is easily accessed on a tablet
- Diagrams can be replaced with updated ones while retaining records of previous checking and confirmations
- Allows sharing information by giving many people access to diagrams and other construction design data

# Job site supervision using tablets with the cloud service (Initiative 1)

## High efficiency for documents used at job sites (photos, job instruction documents, others)

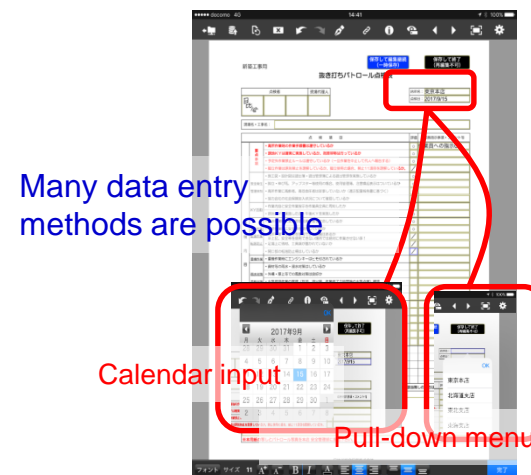
- Photos and comments can be recorded with designs
  - More efficient use of photos
  - Job instruction documents are easier to understand for workers
  - Less time and fewer people needed to produce documents



Photos, comments and photo dates at each pin are automatically transferred to an Excel photo file.

## Preparation of patrol inspection forms

- Create documents easily with the form production app
  - Input data by using the well-known Excel document format
  - Availability of many input patterns makes inputting data efficient
  - Produce complete documents simply by using a tablet to enter data at the job site



Many data entry methods are possible

Calendar input

Pull-down menu

# Establish job site support centers (Initiative 2)

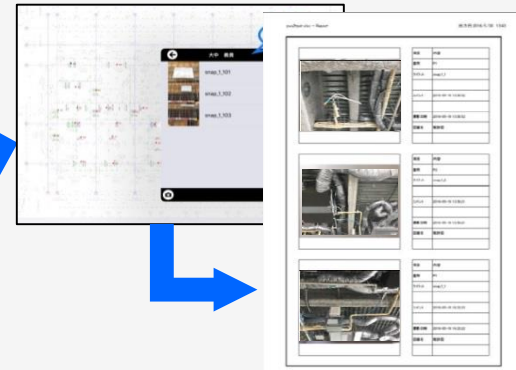
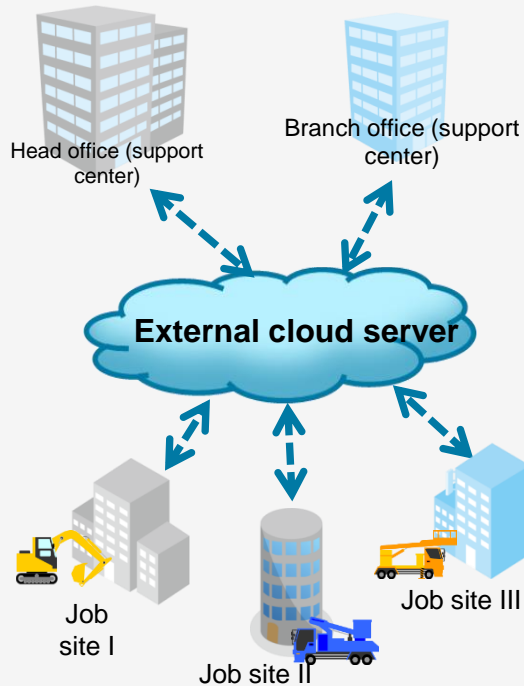
## Support centers

Assistance for job site activities

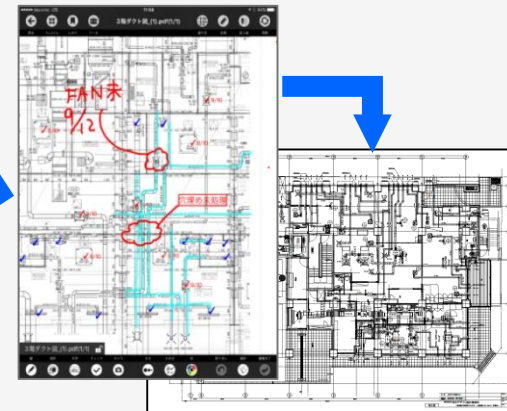
Use ICT for higher efficiency

Reduce tasks requiring a long time

Use of a cloud server allows accessing information from anywhere



Organize photos



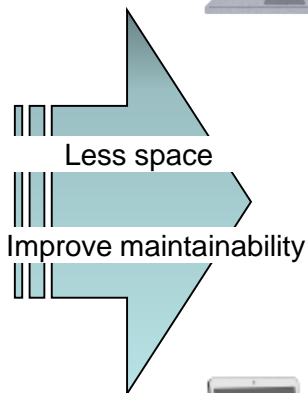
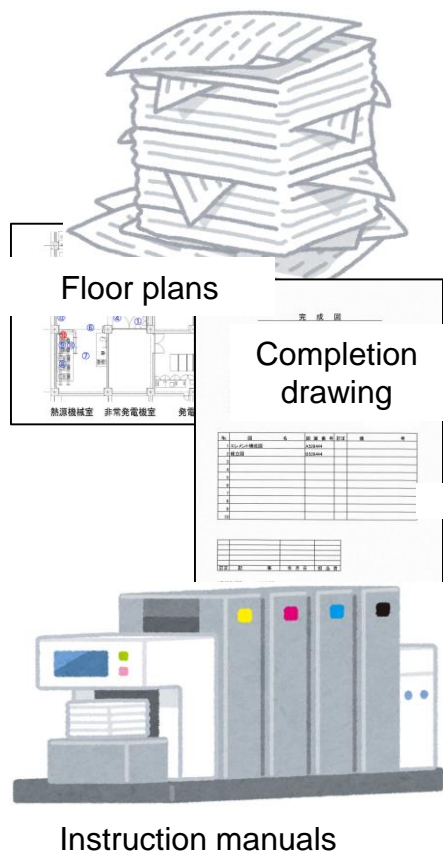
Transfer diagrams to design of completed work

Use assistance of support centers to reduce work performed at job sites



# Use virtual tour manuals for less labor and higher efficiency (Initiative 3)

Consolidate a large volume of paper documents into a single virtual tour manual



360deg. perspective using a panorama camera



Floor plan



One page of a virtual tour manual

\*Patent pending (with other companies)

# Use ICT for business process reforms and stronger management (Initiative 4)

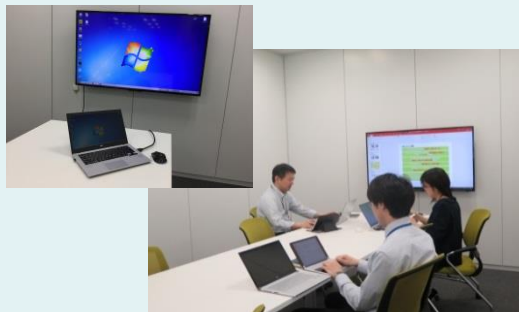
## Improve how people do their jobs by using new cloud-based applications



People can use Wi-Fi for their jobs anywhere in the new head office

### Better management of working hours

Real-time monitoring of working hours facilitates dialogue between the staff and supervisors (human resources) to achieve a proper amount of overtime.



All meeting rooms have monitors

Better meeting quality

Better efficiency

No paper documents

### More efficient TV conferences

The use of a cloud app allows setting up a TV conference with no special equipment. This makes engineering services and sales meetings more effective.



To allow employees to achieve the proper balance between their jobs and other activities, Hibiya Engineering plans to diversify job formats even more, such as working at home, flex-time and non-standard working styles.



# Achievement in FY3/2018

## Activities using advanced life cycle total solutions

- **All-inclusive building proposals for major customers**  
(Initiative 1)
- **Alliances and collaboration with the NTT Group**  
Received the first order as an energy management company  
(Initiative 2)
- **Large-scale LED light installation business uses many alliances**  
(Initiative 3)
- **Activities for carbon reduction and energy conservation**  
Participation in the Shinchi Town smart community project  
(Initiative 4)

# All-inclusive building proposals for major customers (Initiative 1)

**Unified activities by engineering services and sales personnel to create all-inclusive building proposals based on medium/long-term plans with regular inspections and diagnosis services for aging and energy conservation**

- Select suitable buildings based on size, age and other characteristics
- Create comprehensive steady-revenue proposals for individual large buildings

Regular inspections/Diagnosis of aging and energy conservation

Life cycle optimization



Building	Size/Age etc.	Diagnosis	All-inclusive proposal
Company A training center	Main bldg. and 8 others Age: 6 to 43 years	Comprehensive aging diagnosis Energy diagnosis	Proposal for updating of individual buildings in stages Updating air conditioning/heat source/rest rooms
Company B office building	16,000 m <sup>2</sup> 35 years, B1/17 floors	Comprehensive aging diagnosis Pipe/x-ray diagnosis	Replace all tenant air conditioning units Update rest rooms and pipes

# First order as an energy management company (Initiative 2)

- Joint sales with the NTT Group and use of alliances  
First order as an energy management company (AC/Lighting/EMS installation at Company C warehouse)

## Using the Energy Management Business



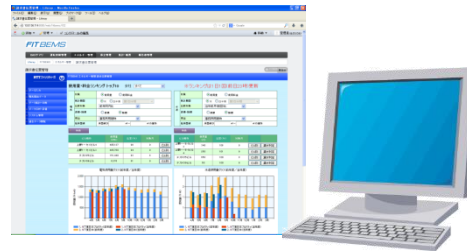
### Energy manager consortium



### Using energy management raises the Hibiya Engineering support ratio from 1/3 to 1/2

- Providing the EMS as an energy management companies raises the support ratio
- No applications or reports needed by the customer because Hibiya Engineering performs all tasks as the energy manager

### ネットワーク型クラウドBEMS (Web型) **FIT BEMS**



### Measure/control of energy



Lighting



A/C

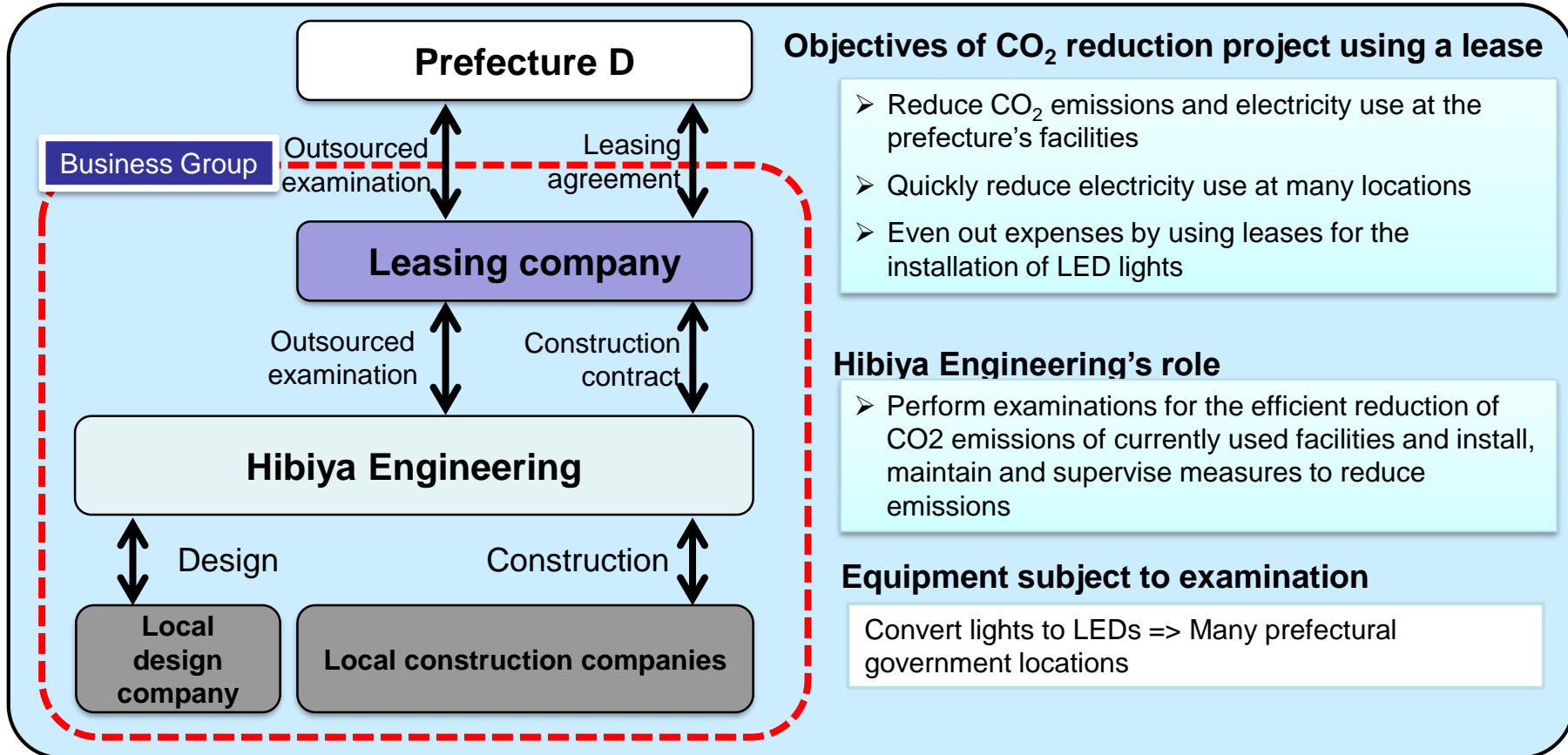
Use energy management support services contracts of **at least 3 years to conserve energy** for customers

- Measure energy use
- Automatic energy control
- Confirmation of energy conservation
- Improve operation of equipment
- Fine tuning of equipment

# Large-scale LED light installation business uses many alliances (Initiative 3)

## Use of many alliances (for lowering CO2 emissions)

Use of leasing scheme by a Japanese prefectural government



The first project by a Japanese prefectural government that uses a lease for the installation of LED lights at many locations to lower CO<sub>2</sub> emissions

# Participation in the Shinchi Town smart community project (Initiative 4)



## The Shinchi Town Smart Community Project

- To reduce carbon and conserve energy, this project will use liquefied natural gas from nearby Soma Harbor to supply heat, electricity and CO<sub>2</sub> to buildings near the railway station.
- Efficient use of management at these buildings

## Hibiya Engineering's role

- Construction of the district energy center
- Hibiya Engineering handled every step, including construction of the building, of the establishment of the district energy center, which is the core of the smart community project.

## Summary

- Construction of cogeneration system, solar power system and storage battery and efficient production and management of energy
- Helps provide a self-reliant energy source for the community in the event of a power interruption due to a natural disaster or other emergency

Energy system for Shinchi station area	
Location	Soma, Fukushima pref.
Floor area	687m <sup>2</sup>
Structure	One floor
Hibiya's work	Construction, A/C, plumbing, electricity

## **Major completed projects**

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# Orders received of the priority domains

## 【Priority Domains】

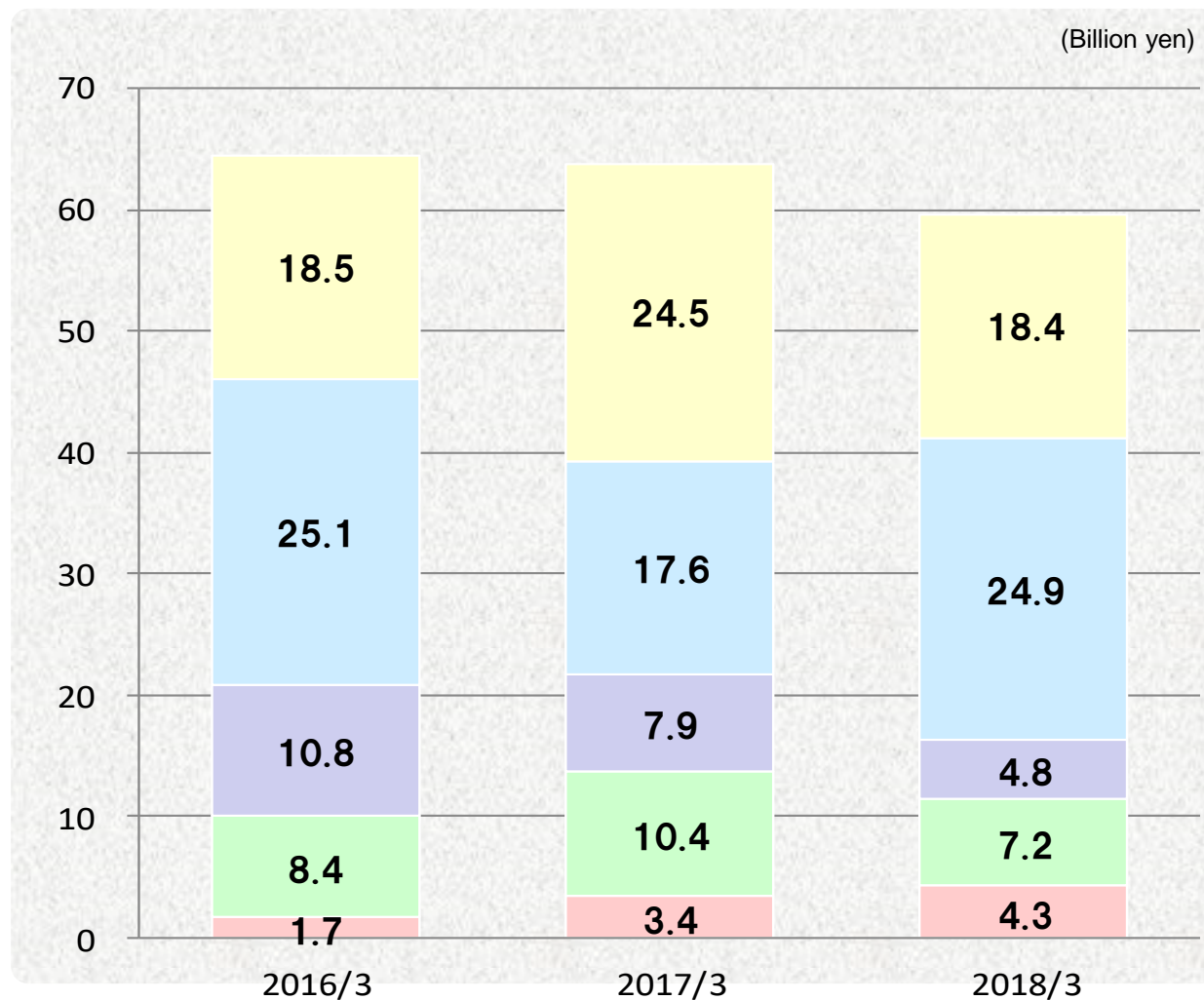
Data centers  
/Information

Office buildings

Manufacturing  
/Distribution

Health care  
/Medical Welfare

Hotels/Resorts





# Office buildings



<b>G-BASE Tamachi</b>	
<b>Location</b>	<b>Minato-ku Tokyo</b>
<b>Floor area</b>	<b>18,242m<sup>2</sup></b>
<b>Structure</b>	<b>18 stories above ground/2 levels of roof</b>
<b>Hibiya's work</b>	<b>Air conditioning/sanitation</b>



<b>Sumitomo Fudosan Onarimon Tower</b>	
<b>Location</b>	<b>Minato-ku Tokyo</b>
<b>Floor area</b>	<b>32,631m<sup>2</sup></b>
<b>Structure</b>	<b>22 stories above ground/2 stories below ground/2 levels of roof</b>
<b>Hibiya's work</b>	<b>Air conditioning/sanitation</b>



# Logistics facilities



Kyoto post office	
Location	Joyo city, Kyoto
Floor area	55,130m <sup>2</sup>
Structure	5 stories above ground
Hibiya's work	Air conditioning



GLP Suita	
Location	Suita city, Osaka
Floor area	165,236m <sup>2</sup>
Structure	4 stories above ground
Hibiya's work	Air conditioning/sanitation

# Educational facilities



Otani University Main Campus	
Location	Kyoto city, Kyoto
Floor area	14,587m <sup>2</sup>
Structure	5 stories above ground/1 level of roof
Hibiya's work	Air conditioning/sanitation



Sapporo Hokuto High School	
Location	Sapporo city, Hokkaido
Floor area	13,087m <sup>2</sup>
Structure	4 stories above ground
Hibiya's work	Air conditioning/sanitation



# Health care facilities



<b>Fujita Health University new building B</b>	
<b>Location</b>	<b>Toyoake city, Aichi</b>
<b>Floor area</b>	<b>31,776m<sup>2</sup></b>
<b>Structure</b>	<b>8 stories above ground/1 story below ground/1 level of roof</b>
<b>Hibiya's work</b>	<b>Sanitation</b>

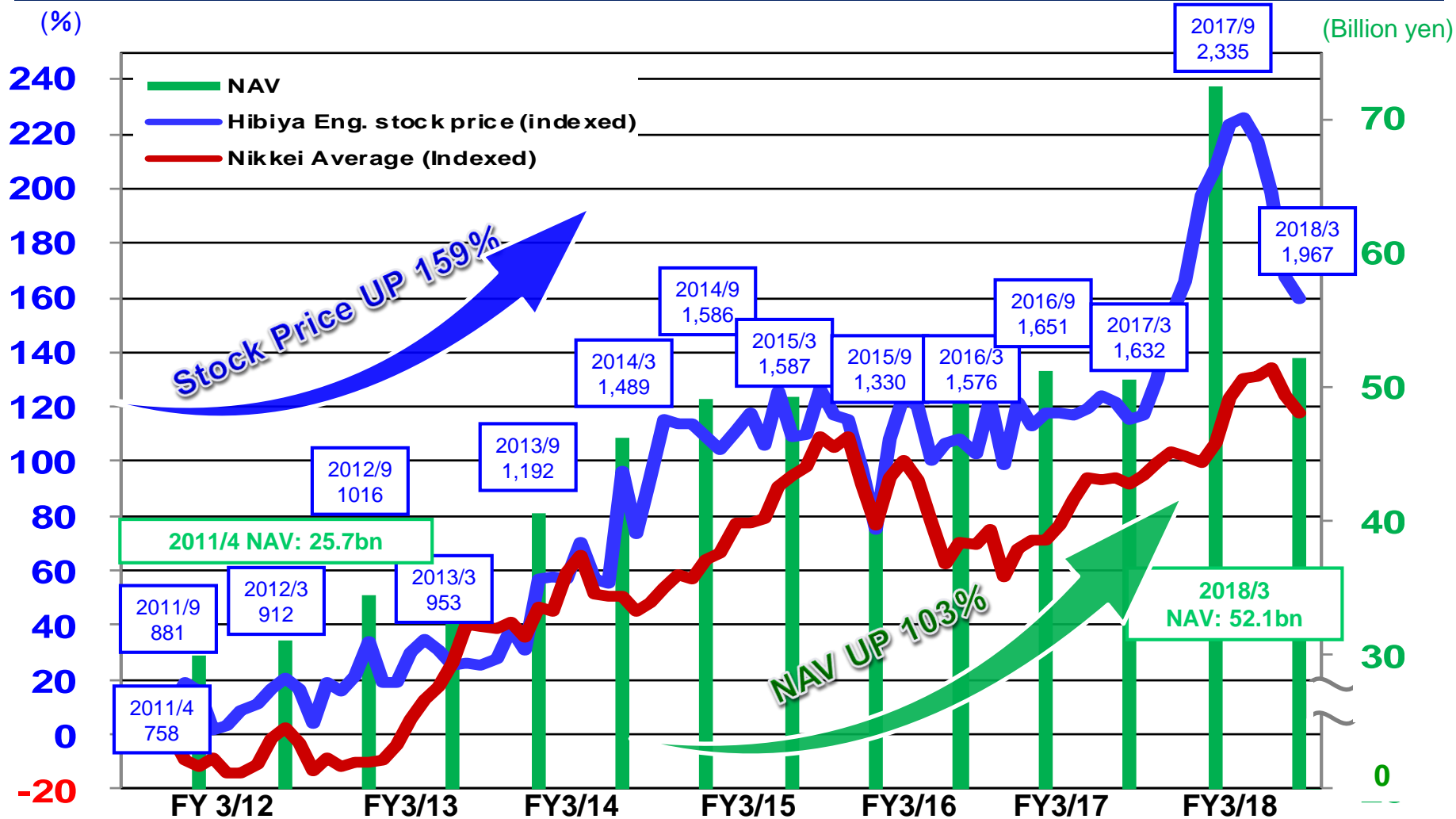
<b>St. Catherine's Hospital</b>	
<b>Location</b>	<b>Chuo-ku, Tokyo</b>
<b>Floor area</b>	<b>3,498m<sup>2</sup></b>
<b>Structure</b>	<b>6 stories above ground/1 story below ground</b>
<b>Hibiya's work</b>	<b>Air conditioning/sanitation</b>

# Reference

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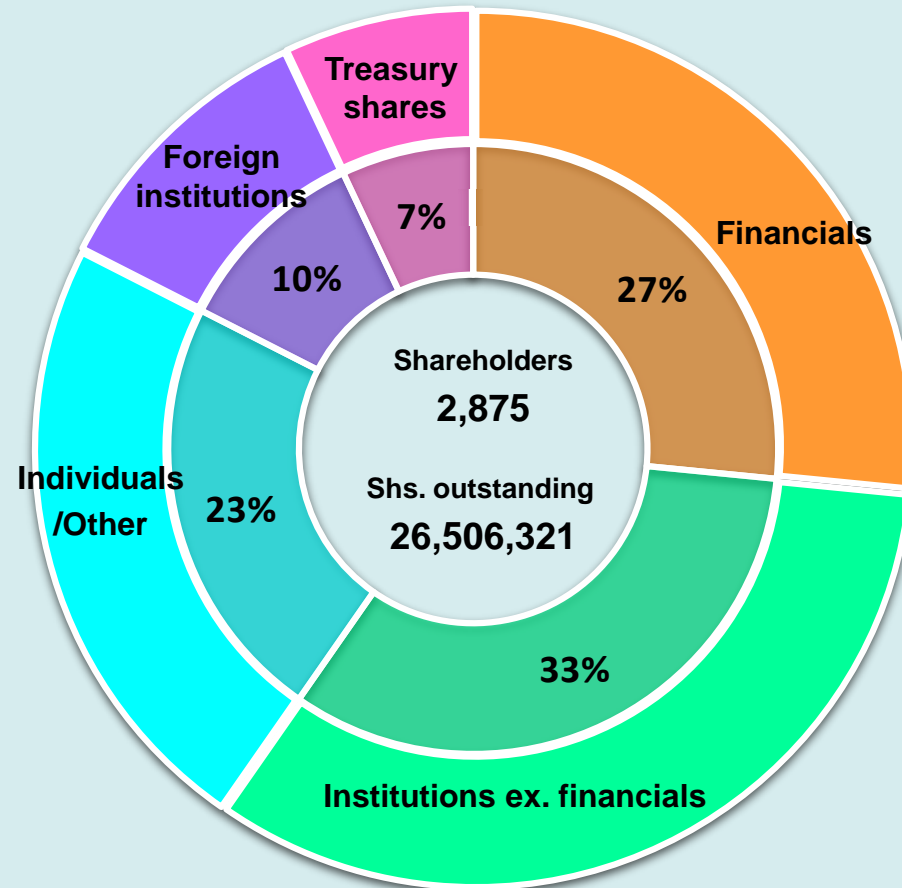
## Stock price and net asset value

### Performance of Hibiya Engineering stock since the end of April 2011



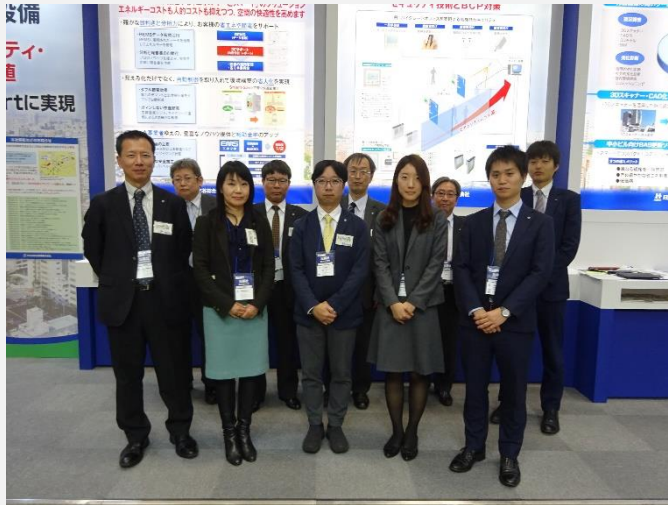
## Shareholders

No. of shareholders: 2,875    Shares outstanding: 26,506,321    (As of end of March 2018)



## New customers, alliances and other sources of opportunities (1)

### Smart Building Expo (Tokyo Big Sight)



#### Summary

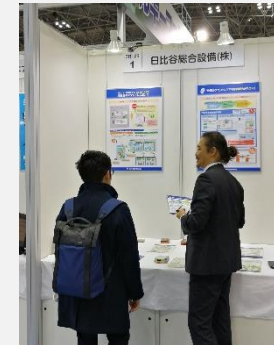
- Attendance was 23,000
- An event for next-generation buildings and building management
- Visitors to the booth completed questionnaires and were contacted afterward by salespeople

#### Hibiya Engineering booth exhibits

- Energy conservation system and energy management support service
- Security and business continuity planning
- Solutions in 3 categories of value after completion of a project
- Demand control system (Hibiya Tsusho)
- Security solutions (Nikkei)



### Energy Conservation Fair 2018 (Tokyo Big Sight)



#### Summary

- The exhibition covers both energy conservation and energy management
- The event included booths and seminars

#### Hibiya Engineering booth exhibits

- Energy management
- Demand response
- Analysis/Testing support

### Data Center Expo (Fall) Makuhari Messe



### JFMA Facility Management Forum (Tower Hall Funabori)





## New customers, alliances and other sources of opportunities (2)

### Business Fair Chu-Shikoku 2018



An event for companies in western Honshu and Shikoku

Presented 3D scanner and oil bacteria system

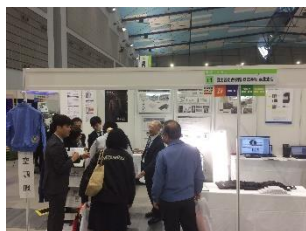
### Building Construction Expo Nagoya



First participation in the only building construction exhibition in central Japan

Business continuity planning packages, water conservation systems and other products

### Business Match Tohoku 2017



Joint exhibition of 3 Hibiya group companies

Ideas for conversion to LED lights, cool clothing, secure key holding box using vein authentication

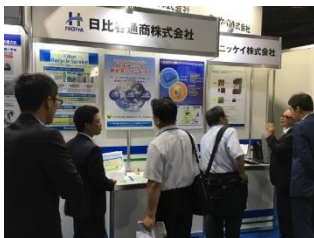
### Eco Techno 2017



The largest business fair in Kyushu

A new idea for job site examination support using a 3D scanner

### Kansai Smart Building Expo



Joint exhibition of 3 Hibiya group companies

Examples of life cycle total solutions projects

### Environment Plaza Sapporo 2017



A cogeneration system using hot spring natural gas was the primary exhibit in the Hibiya Engineering booth

There was also an exhibit for children as part of Hibiya Engineering's CSR activities



## Hibiya Engineering selected for a 2017 Cogeneration Award

### Cogeneration system that uses combustible byproduct gas at Kawane Hot Spring

Outstanding Achievement Award, private sector category, Cogeneration Awards 2017  
(Advanced Cogeneration and Energy Utilization Center)



This award was received jointly with:

City of Shimada (project owner)

Hibiya Engineering

National University Corporation Shizuoka  
University

Yanmar Energy Systems Co., Ltd.

# 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)

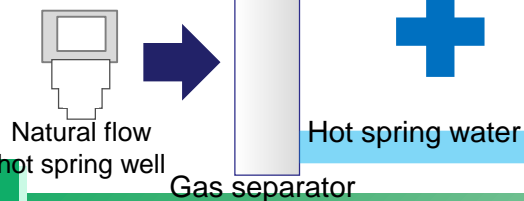
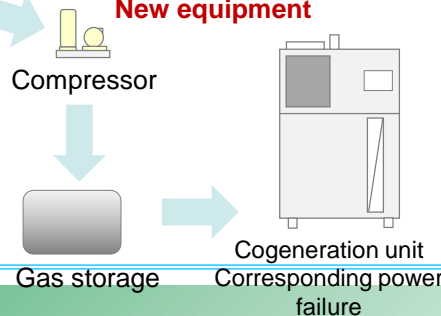
For spa hot water (155kW)

Electricity

Heat

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

### New equipment



Hot spring water

## The New Hibiya Information Plaza

In January 2018, Hibiya Engineering began operating the Hibiya Information Plaza at its head office.

- The plaza supplies information about Hibiya Engineering technologies and frequently hosts seminars.
- The plaza is used for sales meetings with customers and recruiting activities.
- A large monitor gives visitors a panoramic view of Hibiya Engineering's Haneda Safety Training Center.
- Visitors can also learn about Smart DASH®, a smart air conditioning system for data centers, of NTT Facilities, Inc.



Hibiya Information Plaza



A seminar at the plaza

## Heat run test for data centers

The heat run test – A preliminary load testing under actual conditions to improve reliability

Prior to completion, an environmental evaluation was performed by producing the environmental conditions of the server room where the system will be installed.

- Conditions similar to the actual environment were created by generating a thermal load equivalent to heat produced by servers.
- The mock heat source developed by Hibiya Engineering can produce the same amount of heat as actual servers do. The heat level can be adjusted easily.
- Capable of testing a 420kW thermal load, the highest level in Japan

### The heat run testing process

Plan

- Determine the verification method
- Create a plan and implementation outline

Test

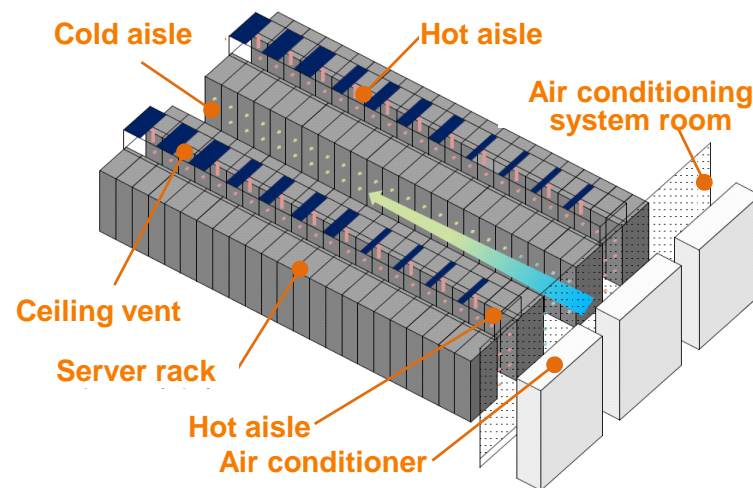
- Perform confirmations using the designated procedure
- People can observe the test

Report

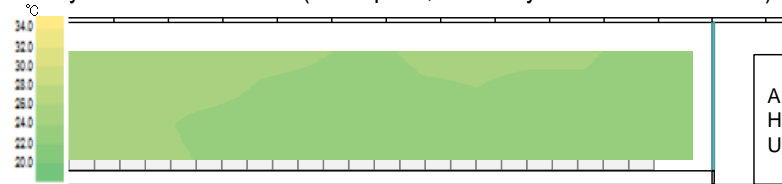
- Report of test results
- Proposals for how to operate the system



Mock heat generation unit in a server rack (made by Nikkei)



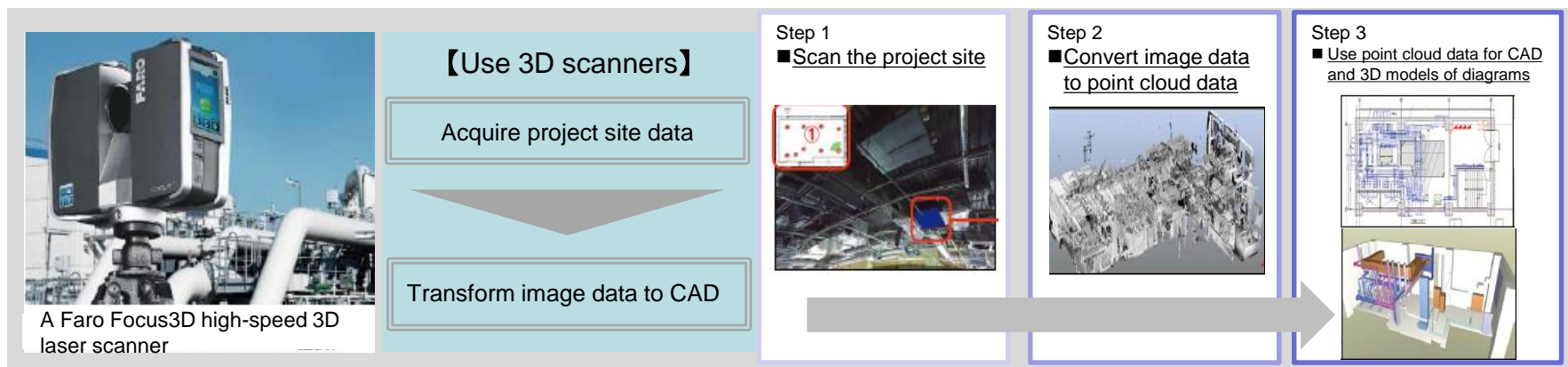
Layout of a server room (conceptual, for AC system with wall outlets)



Vertical temperature distribution at center of central cold aisle

## 3D Scanners

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



### 【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

Started using this method as a support system for project site surveys

【Use of 3D scanners】 (2011 to 2015 1H)

Used mainly in the following locations

NTT Group

Educational institutions

Hotels

Factories

**Construction support** (about 40 projects  
[NTT Group buildings, historic structures, hotels, schools, gymnasiums, others])

**Maintenance support** (about 55 projects  
[NTT Group buildings, historic structures, hotels, schools, gymnasiums, others])

Utilizing this technique as much as possible as a renovation technology

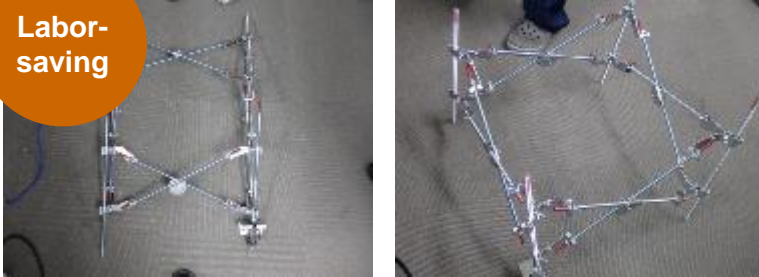


## Technologies for efficient construction processes

Many earthquake-resistant construction methods to meet various requirements

Lineup of earthquake-resistant fasteners

Labor-saving



**Hanging bolts for labor-saving installation of earthquake-resistant equipment holder**

- Equipment hanging metal fasteners fabricated at factory
- Folded for transportation to the job site
- Then simply tighten bolts to install

Labor-saving  
Light weight



**Ceiling cassette to hold AC units in place**

- Light weight due to use of thin plates
- Assembled to use less space
- Use of steel brackets reduces the cost

ECO support bracket

Low cost



**Support for heavy equipment**

- Holds equipment up to 125kg
- Suspension length up to 1,150mm
- Seismic tests have confirmed earthquake safety under these conditions

## Seismic tests confirm performance

Seismic table tests have demonstrated that these technologies will meet customers' demands

Verifi-  
cation  
test



Test of heavy equipment holder



ECO support bracket seismic test

# Services and technologies of Hibiya Engineering group

Hibiya Tsusho Trading company

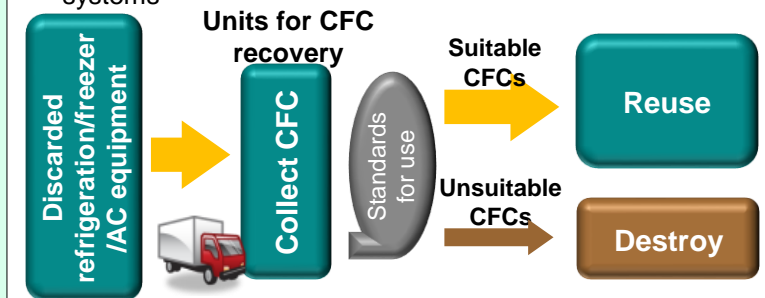
## Reuse of recovered chlorofluorocarbons (CFCs)

### Highlights of processing CFCs for reuse

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

### 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



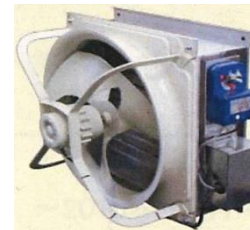
CO<sub>2</sub> emissions from the reuse of CFCs are only 1/12 of emissions from CFC destruction

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

Nikkei Manufacturer

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

### Damper with high-pressure blower



- ▶ Unitized high-pressure blower, damper and connection duct
- ▶ Cuts amount of labor required at the jobsite

### Environmentally responsible support brackets



- ▶ Used to suspend air conditioning systems
- ▶ Lighter than conventional brackets and less costly to transport

### Mini-balcony unit



- ▶ Decorative duct cover for an apartment building balcony
- ▶ Combines air supply, refrigerant and drain pipes for compact placement




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# **Earnings Announcement FY3/18**

**Hibiya Engineering, Ltd.**

**May 25, 2018**



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These materials include forward-looking statements that incorporate risks and uncertainties and are not guarantees concerning future performance. Future performance may differ from forecasts in these materials due to changes in the operating environment and other reasons.