

# Financial Results for FY2019 (for the year ended March 31, 2020)

**IHI**

May 19, 2020

**IHI Corporation**

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# 1. Consolidated Results for FY2019



# 1. Consolidated Results for FY2019 Summary of Financial Results

Note: Average exchange rates for FY2019 US\$ 1.00= ¥109.16

February 6, 2020 Forecast

(In billion yen)

	FY2018	FY2019	Change
Orders received	1,399.2	1,400.0 1,373.9	▲ 26.1 ▲ 25.2
Net sales	1,483.4	1,400.0 1,386.5	▲ 13.5 ▲ 96.9
Operating profit	82.4	60.0 60.7	0.7 ▲ 21.6
Ordinary profit	65.7	34.0 32.2	▲ 1.8 ▲ 33.4
Profit before income taxes	69.4	38.7	▲ 30.6
Profit attributable to owners of parent	39.8	16.0 12.8	▲ 3.2 ▲ 27.0

# 1. Consolidated Results for FY2019

## Financial Results by Segment

### ■ Orders received & Order backlog

(In billion yen)

February 6, 2020 Forecast

	Orders received			Order backlog		
	FY2018	FY2019	Change	FY2018	FY2019	Change
Resources, Energy and Environment	285.5	316.9	▲ 31.3	523.1	521.2	▲ 1.9
Social Infrastructure and Offshore Facility	124.4	196.9	▲ 72.4	191.6	229.6	▲ 37.9
Industrial System and General-Purpose Machinery	458.9	420.1	▲ 38.8	180.3	190.8	▲ 10.4
Aero Engine, Space and Defense	494.3	420.1	▲ 74.1	562.6	493.6	▲ 68.9
<b>Total Reportable Segment</b>	<b>1,363.2</b>	<b>1,354.1</b>	<b>▲ 9.1</b>	<b>1,457.8</b>	<b>1,435.4</b>	<b>▲ 22.3</b>
Others	81.4	68.8	▲ 12.5	20.4	26.6	6.1
Adjustment	▲ 45.4	▲ 49.0	▲ 3.5	-	-	-
<b>Total</b>	<b>1,399.2</b>	<b>1,373.9</b>	<b>▲ 25.2</b>	<b>1,478.2</b>	<b>1,462.0</b>	<b>▲ 16.2</b>
Overseas orders received / order backlog	648.5	691.3	42.7	579.8	605.5	25.6
% of Overseas orders received / order backlog	46%	50%	4%	39%	41%	2%

# 1. Consolidated Results for FY2019

## Financial Results by Segment

### ■ Net sales & Operating profit

February 6, 2020 Forecast

(In billion yen)

	Net sales			Operating profit		
	FY2018	FY2019	Change	FY2018	FY2019	Change
Resources, Energy and Environment	377.0	327.7	▲49.3	3.3	4.7	1.3
Social Infrastructure and Offshore Facility	143.1	152.8	9.6	14.2	13.4	▲0.7
Industrial System and General-Purpose Machinery	441.0	406.4	▲34.6	23.1	11.4	▲11.6
Aero Engine, Space and Defense	492.2	480.8	▲11.3	46.4	40.3	▲6.1
<b>Total Reportable Segment</b>	<b>1,453.5</b>	<b>1,367.9</b>	<b>▲85.6</b>	<b>87.1</b>	<b>70.0</b>	<b>▲17.1</b>
Others	79.3	70.3	▲8.9	2.3	3.5	1.2
Adjustment	▲49.4	▲51.7	▲2.3	▲7.0	▲12.7	▲5.7
<b>Total</b>	<b>1,483.4</b>	<b>1,386.5</b>	<b>▲96.9</b>	<b>82.4</b>	<b>60.7</b>	<b>▲21.6</b>

Overseas sales	713.5	663.0	▲50.5
% of overseas sales	48%	48%	0%

# 1. Consolidated Results for FY2019

## Financial Results by Segment

- Analysis of change in operating profit from the corresponding previous period

(In billion yen)

	Change in net sales	Change in construction profitability	Change in foreign exchange rate	Change in SG&A	Total
Resources, Energy and Environment	▲ 5.2	5.2	▲ 0.2	1.5	1.3
Social Infrastructure and Offshore Facility	▲ 0.6	0.8	▲ 0.1	▲ 0.8	▲ 0.7
Industrial System and General-Purpose Machinery	▲ 12.9	▲ 2.3		3.6	▲ 11.6
Aero Engine, Space and Defense	0.1	▲ 5.8	▲ 1.5	1.1	▲ 6.1
<b>Total Reportable Segment</b>	<b>▲ 18.6</b>	<b>▲ 2.1</b>	<b>▲ 1.8</b>	<b>5.4</b>	<b>▲ 17.1</b>
Others		0.5		0.7	1.2
Adjustment		▲ 0.9		▲ 4.8	▲ 5.7
<b>Total</b>	<b>▲ 18.6</b>	<b>▲ 2.5</b>	<b>▲ 1.8</b>	<b>1.3</b>	<b>▲ 21.6</b>

There are cases that the aggregated amount of each segment or factor doesn't match to the total due to rounding off.

# 1. Consolidated Results for FY2019

## Non-operating Income / Expenses

(In billion yen)

	FY2018	FY2019	Change
Net interest expenses (incl. dividend income)	▲ 1.1	▲ 2.0	▲ 0.9
Share of profit/loss(▲) of entities accounted for using equity method	4.1	▲ 12.9	▲ 17.0
Foreign exchange gains / losses (▲)	0.0	▲ 2.0	▲ 2.0
Others	▲ 19.6	▲ 11.3	8.2
<b>Non-operating Income / Expenses(▲)</b>	<b>▲ 16.7</b>	<b>▲ 28.5</b>	<b>▲ 11.8</b>

**Change of the rate(US\$)** FY2018 +4.75yen (beginning 106.24yen→end 110.99yen)  
 FY2019 ▲2.16yen (beginning 110.99yen→end 108.83yen)

# 1. Consolidated Results for FY2019

## Extraordinary Income / Losses

(In billion yen)

	FY2018	FY2019	Change
Gain on sales of non-current assets	—	4.4	4.4
Gain on transfer of business	1.1	(※) 3.8	2.7
Gain on transfer of equity interest of subsidiaries and associates	—	2.2	2.2
Gain on insurance claims	—	1.1	1.1
Gain on sales of shares of subsidiaries and associates	4.1	0.2	▲ 3.9
<b>Extraordinary Income</b>	<b>5.3</b>	<b>11.7</b>	<b>6.4</b>
Loss on valuation of investment securities	—	▲ 4.8	▲ 4.8
Impairment loss	▲ 1.6	▲ 0.4	1.1
<b>Extraordinary Losses</b>	<b>▲ 1.6</b>	<b>▲ 5.2</b>	<b>▲ 3.6</b>
<b>Extraordinary Income / Losses (▲)</b>	<b>3.6</b>	<b>6.5</b>	<b>2.8</b>

(※) Transfer of intellectual property assets

# 1. Consolidated Results for FY2019

## Balance Sheets

(In billion yen)

	As of March 31, 2019	As of March 31, 2020	Change
<b>Total assets</b>	<b>1,664.5</b>	<b>1,740.7</b>	<b>76.2</b>
(Cash and deposits)	(94.9)	(147.2)	(52.2)
(Trade receivables)	(377.6)	(403.8)	(26.1)
(Inventories)	(441.9)	(445.5)	(3.6)
<b>Total liabilities</b>	<b>1,282.8</b>	<b>1,387.0</b>	<b>104.1</b>
(Trade payables)	(290.0)	(262.5)	(▲ 27.4)
(Advance received)	(157.5)	(151.7)	(▲ 5.7)
(Interest-bearing liabilities) (*1)	(355.0)	(488.1)	(133.0)
<b>Total net assets</b>	<b>381.6</b>	<b>353.7</b>	<b>▲ 27.9</b>
Shareholders' equity	343.4	329.2	▲ 14.2
Accumulated other comprehensive income	5.6	▲ 2.8	▲ 8.5
Non-controlling interests and others	32.5	27.3	▲ 5.1
<b>Total liabilities and net assets</b>	<b>1,664.5</b>	<b>1,740.7</b>	<b>76.2</b>
<b>D/E ratio(times) (*2)</b>	<b>0.93</b>	<b>1.38</b>	<b>0.45</b>
<b>Equity ratio</b>	<b>21.0%</b>	<b>18.7%</b>	<b>▲ 2.2%</b>
<b>ROIC (*3)</b>	<b>8.7%</b>	<b>5.7%</b>	<b>▲ 3.0%</b>

(\*1) Interest-bearing liabilities includes the amount of lease obligations.  
(as of March 31, 2019: ¥17.4 billion / as of March 31, 2020 : ¥27.3 billion)

(\*2) D/E ratio = Interest-bearing liabilities / net assets

(\*3) ROIC (Return On Invested Capital)  
=(Operating profit + Interest income and dividend income) after tax / (Equity + Interest-bearing liabilities)

# 1. Consolidated Results for FY2019

## Cash Flows

IHI

(In billion yen)

	FY2018	FY2019	Change
<b>Cash flows from operating activities</b>	<b>46.4</b>	<b>14.5</b>	<b>▲ 31.8</b>
<b>Cash flows from investing activities</b>	<b>▲ 79.2</b>	<b>▲ 75.8</b>	<b>3.3</b>
<b>Free cash flows</b>	<b>▲ 32.8</b>	<b>▲ 61.3</b>	<b>▲ 28.5</b>
<b>Cash flows from financing activities</b>	<b>16.4</b>	<b>115.2</b>	<b>98.8</b>

# 1. Consolidated Results for FY2019 Supplementary Information

## (1) R&D/CAPEX/Depreciation & Amortization

(In billion yen)

	<b>FY2018</b>	<b>FY2019</b>
<b>R&amp;D</b>	<b>36.5</b>	<b>38.1</b>
<b>CAPEX</b>	<b>74.3</b>	<b>80.6</b>
<b>Depreciation &amp; Amortization</b>	<b>48.0</b>	<b>53.8</b>

“CAPEX” and “Depreciation & Amortization” consist of amounts related to tangible fixed assets and software.  
(The figures in “FY2018” were modified since they were related to only tangible fixed assets until FY2018.)

## (2) Overseas Sales by Region

(In billion yen)

	<b>FY2018</b>	<b>FY2019</b>
<b>Asia</b>	<b>145.4</b>	<b>123.8</b>
<b>China</b>	<b>114.6</b>	<b>90.6</b>
<b>North America</b>	<b>327.0</b>	<b>364.6</b>
<b>Central and South America</b>	<b>12.1</b>	<b>9.0</b>
<b>Europe</b>	<b>102.2</b>	<b>68.6</b>
<b>Others</b>	<b>11.9</b>	<b>6.3</b>
<b>Total</b>	<b>713.5</b>	<b>663.0</b>
<b>% of overseas sales</b>	<b>48%</b>	<b>48%</b>

# 1. Consolidated Results for FY2019 Supplementary Information

## (3) Assets balance by Segment

(In billion yen)

	Assets balance		
	As of March 31, 2019	As of March 31, 2020	Change
Resources, Energy and Environment	292.6	291.8	▲ 0.8
Social Infrastructure and Offshore Facility	231.3	237.6	6.3
Industrial System and General-Purpose Machinery	355.6	341.7	▲ 13.8
Aero Engine, Space and Defense	569.5	621.0	51.4
<b>Total Reportable Segment</b>	<b>1,449.2</b>	<b>1,492.2</b>	<b>43.0</b>
Others	101.7	105.1	3.4
Adjustment	113.5	143.3	29.7
<b>Total</b>	<b>1,664.5</b>	<b>1,740.7</b>	<b>76.2</b>

## **2. Forecasts of the Consolidated Results for FY2020**

#### Announcement of Forecasts for FY2020

- Forecasts for FY2020 are "undetermined" and announcement is postponed, due to difficulty for reasonable estimate of impact of COVID-19 on business results.
- We will assess the impact on business results carefully, and promptly announce reasonable forecasts once it become possible to provide it.

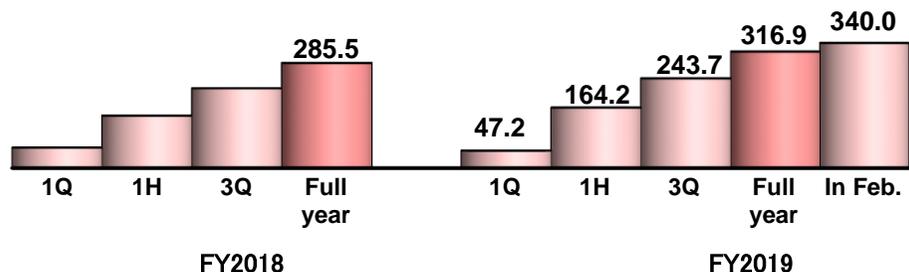
## 3. Financial Results by Segment

# 3. Financial Results by Segment

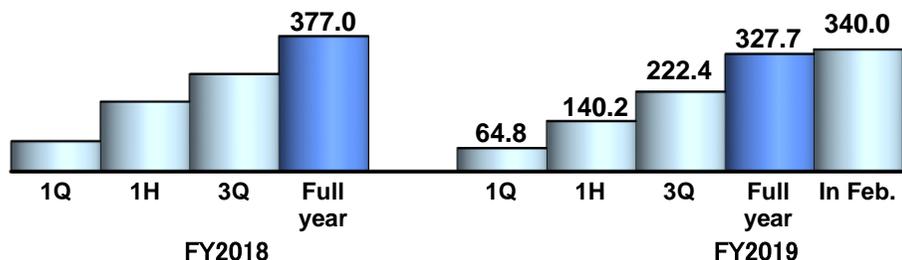
## Resources, Energy and Environment

(In billion yen, accumulated amount)

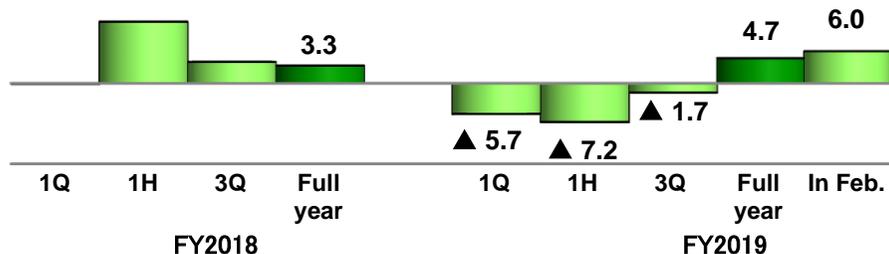
### Orders received



### Net sales



### Operating profit



### <Results by business segment>

#### 【 Orders received 】

Orders received increased owing to an effect of receiving a large-scale overseas project in the Boilers Business, despite the decrease in the Plants Business.

#### 【 Net sales 】

Net sales decreased due to a delay in project progress in the Boilers Business and to a reverse effect of the progress of large-scale projects in the Plants Business in FY2018.

#### 【 Operating profit 】

Operating profit increased due to the convergence of deterioration of profitability of the previous fiscal year in the Plants Business, despite the effect of a decrease of sales in the Boilers Business and the deterioration of profitability in the Power Systems Business.

### <FY2019 Results (vs. Forecasts in February)>

Orders received decreased in the Plants Business and the Power Systems Business.

Net sales and operating profit decreased in the Power Systems Business.

### 3. Financial Results by Segment

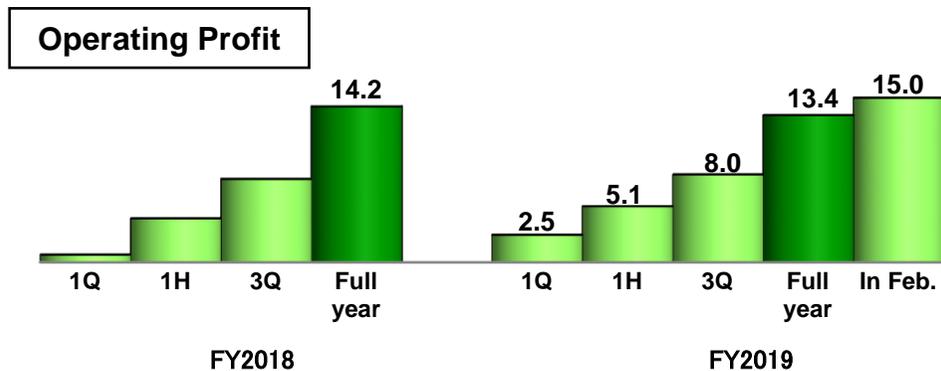
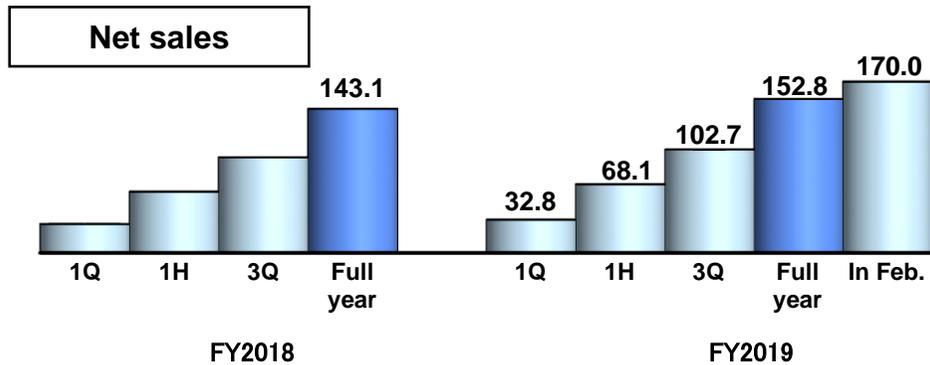
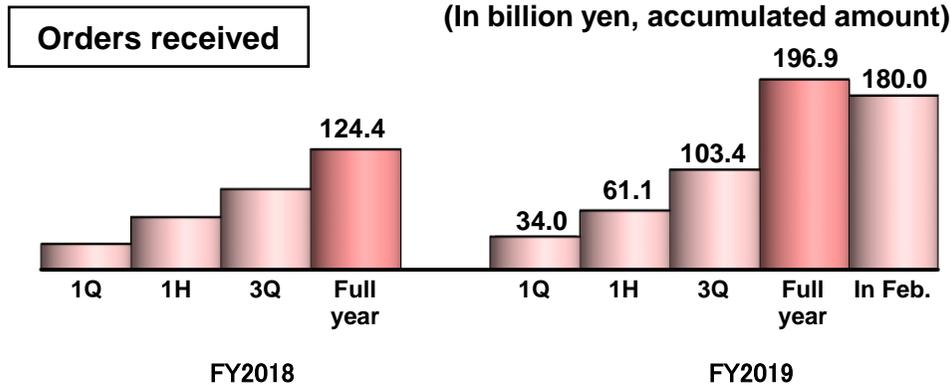
## Resources, Energy and Environment

(In billion yen)

	Orders received		Net sales							
	FY2018	FY2019	FY2018				FY2019			
	Full year	Full year	1Q	1H	3Q	Full year	1Q	1H	3Q	Full year
Power Systems	82.8	82.6	17.9	42.2	63.2	93.4	17.9	36.0	53.4	86.1
Boilers	79.7	95.6	27.0	69.7	94.5	121.5	16.8	44.8	70.2	98.4
Plants	56.4	32.1	23.0	45.8	59.5	80.1	13.8	26.6	39.2	56.4
Nuclear power	30.5	36.2	5.0	12.0	16.7	33.1	4.8	8.9	13.5	27.9

### 3. Financial Results by Segment

## Social Infrastructure and Offshore Facility



### <Results by business segment>

#### 【 Orders received 】

Orders received increased owing to an effect of receiving large-scale overseas projects in the Bridges/water gates Business.

#### 【 Net sales 】

Net sales increased in the Bridges/water gates Business, despite the decrease in the Shield systems Business.

#### 【 Operating profit 】

Operating profit decreased due to the decreases in sales in the Shield systems Business, despite the increase in the Transport systems Business.

### <FY2019 Results (vs. Forecasts in February)>

Orders received increased in the Bridges/water gates Business, despite the decrease in the Transport systems Business.

Net sales decreased in the Bridges/water gates Business and the Shield systems Business, and operating profit decreased in the Bridges/water gates Business.

### 3. Financial Results by Segment

## Social Infrastructure and Offshore Facility

(In billion yen)

	Orders received		Net sales							
	FY2018	FY2019	FY2018				FY2019			
	Full year	Full year	1Q	1H	3Q	Full year	1Q	1H	3Q	Full year
Bridges/water gates	65.0	111.1	15.2	30.1	46.2	72.0	19.2	38.2	57.5	83.5
Shield systems	14.4	23.6	4.0	9.7	14.6	18.5	4.6	9.7	12.0	15.5
Urban development	16.3	16.5	3.7	7.9	11.9	16.3	3.9	7.9	11.8	16.5

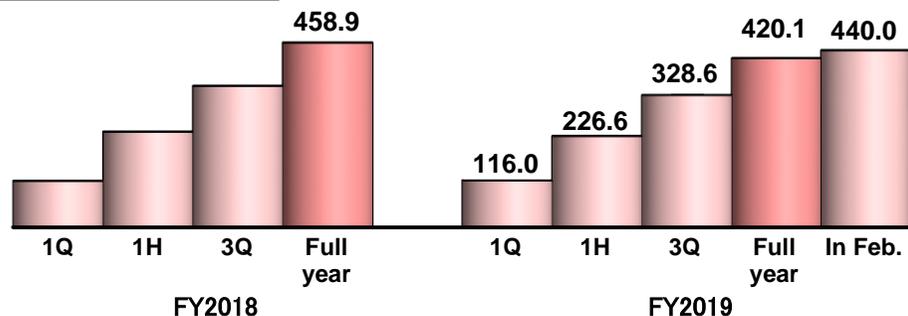
For related information of “Urban development” in Toyosu, please refer to <Appendices> on page 32, 33.

### 3. Financial Results by Segment

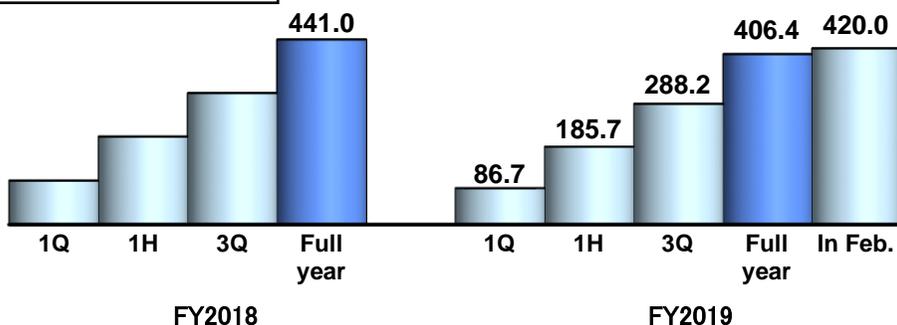
## Industrial System and General-Purpose Machinery

(In billion yen, accumulated amount)

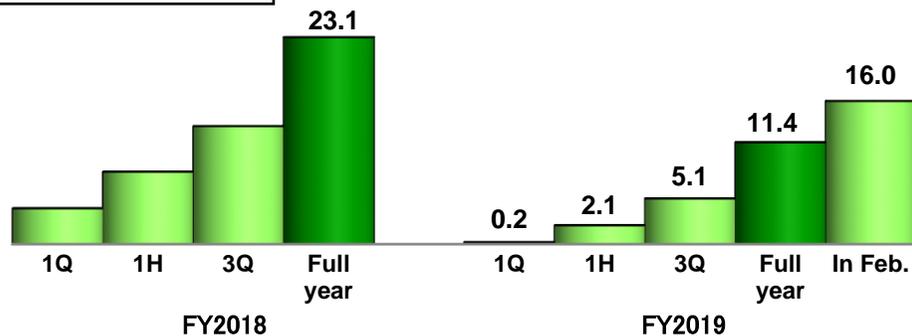
#### Orders received



#### Net sales



#### Operating Profit



#### <Results by business segment>

##### 【 Orders received 】

Orders received declined due to the decrease in the Vehicular turbochargers Business and the Thermal and surface treatment Business, despite the increase owing to an effect of receiving large-scale projects in the Transport machineries Business.

##### 【 Net sales 】

Net sales decreased due to the downturn in the in the Vehicular turbochargers Business and the Thermal and surface treatment Business, plus the effect of transfer of the Small power systems Business in FY2018.

##### < Number of vehicular turbochargers delivered >

(1,000 Units)

	Full Year
FY2018	6,760
FY2019	6,000

##### 【 Operating profit 】

Operating profit decreased due to a decrease of sales in the Vehicular turbochargers Business and the Thermal and surface treatment Business.

#### < FY2019 Results (vs. Forecasts in February) >

Orders received decreased in the Logistics/industrial systems Business.

Net sales decreased in the Vehicular turbochargers Business and the Logistics/industrial systems Business, and operating profit decreased in the Vehicular turbochargers Business and the Rotating machineries Business.

### 3. Financial Results by Segment

## Industrial System and General-Purpose Machinery

(In billion yen)

	Orders received		Net sales							
	FY2018	FY2019	FY2018				FY2019			
	Full year	Full year	1Q	1H	3Q	Full year	1Q	1H	3Q	Full year
Vehicular turbochargers	190.2	155.5	51.6	99.3	143.6	189.5	38.7	76.7	118.8	155.7
Parking	52.5	53.4	7.7	17.9	29.4	49.7	10.0	22.0	33.9	53.0
Rotating machineries	51.3	51.3	10.6	21.5	32.7	49.5	10.4	21.1	33.5	49.0
Thermal and surface treatment	41.3	32.2	11.1	21.0	31.1	41.6	9.8	19.7	29.1	37.7
Transport machineries	33.2	61.2	5.0	7.9	13.7	23.9	3.7	9.2	17.7	29.0

For details of "Vehicular turbochargers", please refer to <Appendices> on page 31.

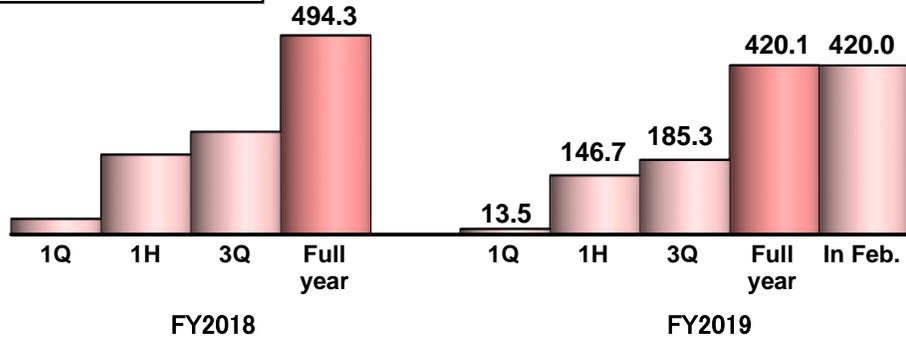
※Net sales for FY2018.3Q in the Vehicular turbochargers Business reflects intercompany adjustments made in FY2018.4Q.

# 3. Financial Results by Segment

## Aero Engine, Space and Defense

### Orders received

(In billion yen, accumulated amount)



### <Results by business segment>

#### 【 Orders received 】

Orders received decreased in the aero engines for Japan Ministry of Defense, the Civil aero engines Business and the Rocket systems/space utilization systems Business.

#### 【 Net sales 】

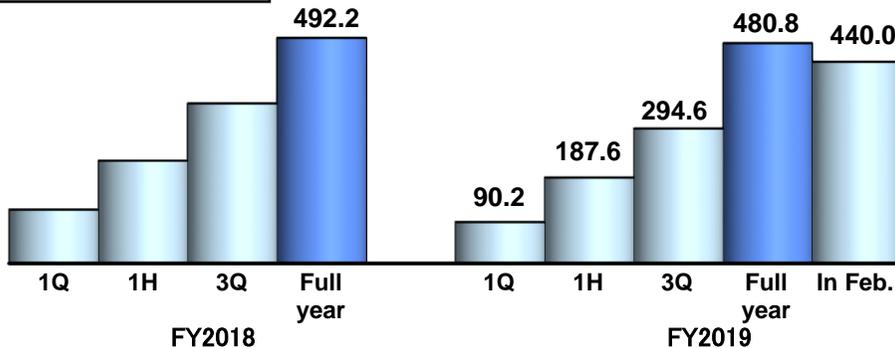
Net sales decreased in the aero engines for Japan Ministry of Defense.

#### <Number of civil aero engines delivered>

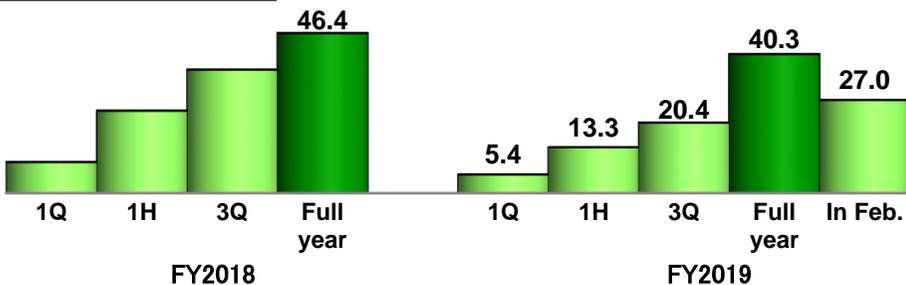
(Units)

	Full Year
FY2018	1,521
FY2019	1,571

### Net sales



### Operating profit



#### 【 Operating profit 】

Operating profit in the Civil aero engines Business declined due to the effect of making its inspection process stricter in the maintenance business and to the additional program costs and so on, while results of initiatives to cut costs for the new engine are appearing .

#### <FY2019 Results (vs. Forecasts in February)>

Net sales and operating profit increased in the Civil aero engines Business.

Regarding IHI's participating engine programs, previously IHI had recognized sales revenue a month behind from the main partners' sales. Since it became possible to obtain sales information earlier, IHI changed to recognize revenue on the same month as the partners' sales.

### 3. Financial Results by Segment

## Aero Engine, Space and Defense

(In billion yen)

	Orders received		Net sales							
	FY2018	FY2019	FY2018				FY2019			
	Full year	Full year	1Q	1H	3Q	Full year	1Q	1H	3Q	Full year
Civil aero engines	334.8	308.2	73.1	152.5	243.2	318.5	65.1	131.5	208.1	333.1

For details of “Civil aero engines”, please refer to <Appendices> on page 30.

# <Appendices>

- Financial Performance
- Progress in a large overseas project
- Topics in the Fourth Quarter under review
- Aero engines
- Vehicular turbochargers
- Urban development

(In billion yen)

	FY2015	FY2016	FY2017	FY2018	FY2019
Net sales	1,539.3	1,468.3	1,590.3	1,483.4	1,386.5
Operating margin	1.4%	3.2%	4.5%	5.6%	4.4%
Operating profit	22.0	47.3	72.2	82.4	60.7
Ordinary profit	9.7	22.0	21.4	65.7	32.2
Profit attributable to owners of parent	1.5	5.2	8.2	39.8	12.8
ROIC (※1)	2.3%	5.0%	7.7%	8.7%	5.7%
CCC (※2)	97days	87days	83days	97days	120days
D/E ratio(times)(※3)	1.12	1.10	0.92	0.93	1.38
ROE (※4)	0.5%	1.6%	2.6%	11.8%	3.8%
Dividends per share (yen)	3 Interim 3 Year-end 0	0	Interim 3 Year-end 30 (※5)	70 Interim 30 Year-end 40	50 Interim 30 Year-end 20
Exchange rate	¥118.27/\$	¥108.27/\$	¥111.00/\$	¥111.09/\$	¥109.16/\$

※1 : ROIC (Return On Invested Capital)

= (Operating profit + Interest income and dividend income) after tax / (Equity + Interest-bearing liabilities)

※2 : CCC = Working capital / Net sales \* 365days

※3 : D/E ratio = Interest-bearing liabilities / Net assets

※4 : ROE (Return on Equity) = Profit attributable to owners of parent

/ (Average of equity for previous fiscal year end and current period end)

※5 : Year-end dividend for FY2017 reflects the consolidation of stock.

## Elba Liquefaction Project



Expected Completion Image



As of Mar 2020

### <Key milestones>

- March 2016: Contract Award
- November 2016: FERC Approval for the commencement of construction
- February 2017: Delivery commencement of MMLS#1 module
- September 2019: Commercial in Service of MMLS#1
- 2nd Quarter, 2020: Substantial Completion of all facilities

**MMLS:** Movable Modular Liquefaction System

This project has totally 10 MMLSs and 1 MMLS consists 79 modules.

### <Project Brief>

- Contract: Lump Sum Turnkey EPC Agreement for the Elba Island Natural Gas Liquefaction Facility and the Southern LNG Expansion Facility
- Job Site: Elba Island, Chatham County, Savannah, Georgia, USA
- Scope: Engineering, Procurement, Construction, and Commissioning of 2.5 MTPA Liquefaction facility

### <Status>

As of the end of March 2020, Commercial In-Service of MMLS#1 through #5, Start-up of MMLS#6, Commissioning of MMLS#7 through #10.  
 Progress of Engineering is 100%, Procurement is 100%, Construction is 99.5%, Commissioning is 90.2%, and Overall Project is 98.9%.

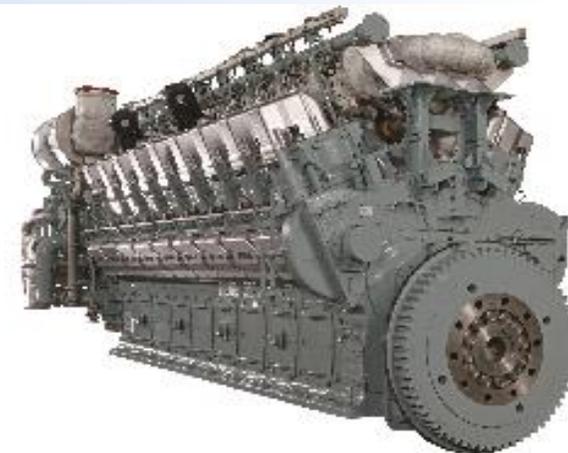
### <Status as of April 23, 2020>

MMLS No.	#1	#2	#3	#4	#5	#6	#7	#8	#9	#10
Mechanical Completion	○	○	○	○	○	○	○	○	○	○
Commissioning (Progress)	○	○	○	○	○	○	○ (88.0%)	○ (81.1%)	○ (61.5%)	○ (52.1%)
In-Service	○	○	○	○	○	○				2nd quarter, 2020

## New high-efficiency gas engine/binary cogeneration system to be installed at Yokohama office

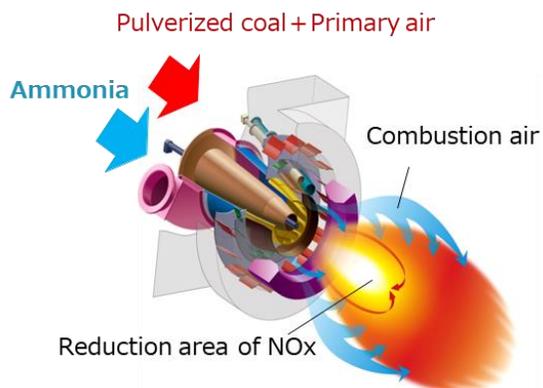
In order to improve its disaster resilience and reduce CO2 emissions, IHI will install a high-efficiency cogeneration system (hereinafter “the Equipment”), packaging a gas engine with the highest efficiency in its class and a binary power generation system that generates electricity from heat derived from the coolant of the gas engine. By setting up an energy management system which enables collection of operational data of the Equipment and gathering and visualization of detailed usage data of electricity in the office, the Equipment will allow IHI to save energy and optimize the balance between demand and supply, and move forward with further reductions in CO2 emissions in the future. The equipment is expected to be completed and operation to begin in April 2021.

IHI has designated its Yokohama office as an environmentally friendly model office with a high level of disaster resilience, and in addition to contributing to the city of Yokohama and the local community, it will continue to work on initiatives to prepare for the carbon-free society by leveraging its technology to reduce CO2 emissions.



< Gas engine/binary cogeneration system to be installed 「12V28AGS」(4000kW, product of IHI Power Systems Co.,Ltd.) >

## Commencement of investigation to achieve co-firing of ammonia in commercial thermal power plants



< Image of 20% ammonia co-firing >

IHI aims to use ammonia fuel as one of initiatives to reduce CO2 emissions from existing thermal power plants. IHI, JERA Co., Inc., Marubeni Corporation and Woodside Energy Ltd. have decided to jointly participate in a project related to co-firing of ammonia in commercial thermal power plants commissioned by the New Energy and Industrial Technology Development Organization (NEDO).

Through the demonstration testing, IHI proceed with the preparation aiming at implementing hydrogen energy including ammonia into the society, and aim to realize carbon-free and recycling societies at an early stage by producing carbon-free ammonia that uses renewable energy and building a "hydrogen / ammonia value chain" that connects transportation, storage, and use.

## IHI receives a series of orders, for the construction of two new bridges and the dismantling of three existing bridges in Myanmar, and for the Bangabandhu Bridge construction project in Bangladesh

IHI Infrastructure Systems (hereinafter, "IIS"), a group company of IHI, has received the following bridge-related construction orders.

- Orders from the Department of Bridge under the Ministry of Construction of the Republic of the Union of Myanmar, for the construction of the new Gyaing Zathabyin and Atran bridges, and the dismantling of three existing bridges, including the Gyaing Kawkareik bridge. The new bridges are expected to be completed in July 2023.
- A joint venture of IIS and Sumitomo Mitsui Construction Co., Ltd. has received orders from the Government of People's Republic of Bangladesh, Ministry of Railways Bangladesh Railways, for the western part of civil works for the Bangabandhu Bridge (Jamuna bridge for railway) construction project.

IIS has been involved in many large bridge construction projects, and has extensive experience in this area. The IHI Group will further promote the work for winning orders for bridges overseas, contributing to the development of these countries by means of the installation of social infrastructure.

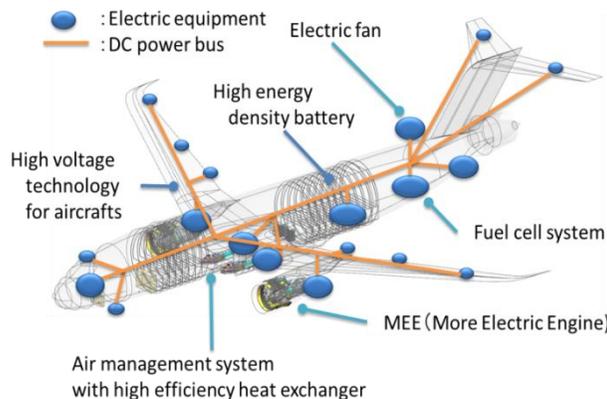


< Bangabandhu Bridge  
expected completion image >  
※Source: OC  
GLOBAL -CHODAI-  
DDC Joint Venture



< Gyaing Zathabyin Bridge  
expected completion image >  
※Source: JICA

## Development of electrification technologies to reduce aviation CO2 emissions



< A concept of "MEAAP" >

IHI leads More Electric Architecture for Aircraft and Propulsion (hereinafter referred to as "MEAAP") that aims at the innovation toward CO2 emission reduction from aviation.

MEAAP focuses on not only the electrification but also the optimization of the aircraft system considering propulsion, thermal management and electrical power management. The essential technical challenges are development of an electric machine and a thermal management system. IHI developed an electric machine (250kW) that can be mounted inside the jet engine rear-end and an air-cooling system for the aircraft onboard 100kW-class high power electronics.

IHI is studying innovative technology aiming at introduction of the MEAAP concept in 2030s. IHI accelerates the development of the electrification technologies, and also considers the possibility of much higher power system.

## (1) Net sales of civil aero engines

(In billion yen)

	Actual						
	'13	'14	'15	'16	'17	'18	'19
<b>Net sales</b>	<b>226.0</b>	<b>267.0</b>	<b>299.1</b>	<b>291.5</b>	<b>281.0</b>	<b>318.5</b>	<b>333.1</b>

## (2) Number of civil aero engines delivered

(Units)

	Actual (accumulated)									Main loading
	'11	'12	'13	'14	'15	'16	'17	'18	'19	
<b>V2500</b>	<b>4,980</b>	<b>5,468</b>	<b>5,969</b>	<b>6,469</b>	<b>6,896</b>	<b>7,236</b>	<b>7,508</b>	<b>7,688</b>	<b>7,735</b>	Airbus A319/320/321
<b>GE90</b>	<b>1,399</b>	<b>1,589</b>	<b>1,806</b>	<b>2,039</b>	<b>2,257</b>	<b>2,457</b>	<b>2,617</b>	<b>2,715</b>	<b>2,824</b>	Boeing B777
<b>CF34</b>	<b>3,242</b>	<b>3,548</b>	<b>3,820</b>	<b>4,156</b>	<b>4,471</b>	<b>4,821</b>	<b>5,085</b>	<b>5,331</b>	<b>5,611</b>	For regional jet (70 to 110 seats)
<b>GE<sub>nx</sub></b>	<b>118</b>	<b>259</b>	<b>468</b>	<b>751</b>	<b>1,035</b>	<b>1,295</b>	<b>1,542</b>	<b>1,826</b>	<b>2,159</b>	Boeing B787/B747-8
<b>PW1100G</b>					<b>16</b>	<b>148</b>	<b>398</b>	<b>1,058</b>	<b>1,784</b>	Airbus A320Neo
<b>Passport20</b>							<b>13</b>	<b>66</b>	<b>142</b>	Bombardier Global7500
<b>Total</b>	<b>9,739</b>	<b>10,864</b>	<b>12,063</b>	<b>13,415</b>	<b>14,675</b>	<b>15,957</b>	<b>17,163</b>	<b>18,684</b>	<b>20,255</b>	

(Note) The number of civil aero engine delivered is the number handed over to the airframe maker, and differs from the number of factory shipments.

## <Net sales by region>

(In billion yen)

	Actual							
	'12	'13	'14	'15	'16	'17	'18	'19
<b>Japan</b>	<b>33.9</b>	<b>35.3</b>	<b>37.5</b>	<b>34.6</b>	<b>38.9</b>	<b>39.8</b>	<b>44.6</b>	<b>39.1</b>
<b>Asia</b>	<b>24.8</b>	<b>29.8</b>	<b>27.5</b>	<b>21.6</b>	<b>15.8</b>	<b>11.7</b>	<b>11.0</b>	<b>10.7</b>
<b>China</b>	<b>18.1</b>	<b>23.4</b>	<b>24.3</b>	<b>24.9</b>	<b>48.5</b>	<b>71.9</b>	<b>63.1</b>	<b>59.3</b>
<b>North America</b>	<b>1.3</b>	<b>1.6</b>	<b>1.8</b>	<b>2.4</b>	<b>3.3</b>	<b>8.4</b>	<b>11.6</b>	<b>10.8</b>
<b>Central and South America</b>	<b>0.0</b>	<b>0.0</b>	<b>0.7</b>	<b>3.4</b>	<b>6.1</b>	<b>7.4</b>	<b>7.5</b>	<b>6.6</b>
<b>Europe</b>	<b>43.2</b>	<b>60.2</b>	<b>75.6</b>	<b>74.3</b>	<b>61.7</b>	<b>81.1</b>	<b>51.3</b>	<b>28.9</b>
<b>Others</b>	<b>0.0</b>	<b>0.1</b>						
<b>Total</b>	<b>121.6</b>	<b>150.7</b>	<b>167.7</b>	<b>161.6</b>	<b>174.6</b>	<b>220.5</b>	<b>189.5</b>	<b>155.7</b>

## (1) Lease revenue in Toyosu

(In billion yen)

	Actual							
	'12	'13	'14	'15	'16	'17	'18	'19
Lease revenue	9.2	9.1	9.3	10.1	9.3	9.2	9.3	9.4

## (2) Lease revenue and expense in Toyosu (FY2019)

(In billion yen)

	Lease revenue	Lease expense		Lease income
		Depreciation	Others	
FY2019	9.4	4.0	3.4	2.0

## (3) Fair value as of March 31, 2020 of rental properties in Toyosu

(In billion yen)

	Amount recorded in the balance sheet			Fair value as of March 31, 2020(B)	(B) - (A)
	Balance as of April 1, 2019	Net change	Balance as of March 31, 2020(A)		
FY2019	53.5	2.3	55.8	203.6	147.7

(Note) The amount recorded in consolidated balance sheet is calculated by subtracting accumulated depreciation and impairment losses from acquisition cost.

The fair value at fiscal year-end is based on the values mainly in the appraisal report by external real estate appraisers.

# Development Plan for Toyosu 1 to 3 chome Area

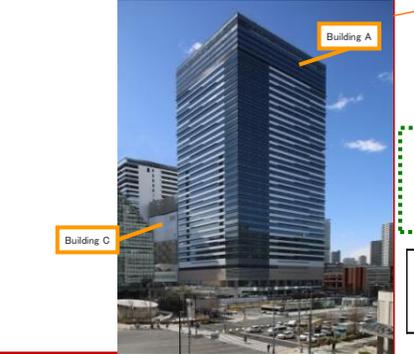
**Kindergarten, Nursery school, Café, Marriage ceremonial hall.**  
 Site area : 19,492㎡  
 Completed in March 2010 to February 2011



**Urban Dock LaLaport Toyosu ANNEX (Mitsui Fudosan Co., Ltd.)**  
 5 floors above ground, Approx. 25m high  
 Store floor space : 24,721㎡  
 Opened in October 2006



**Complex building A・C. (IHI and Mitsui Fudosan)**  
 36 floors above ground, Approx. 178m high  
 Gross floor area : 185,000㎡  
 Completed in March 2020



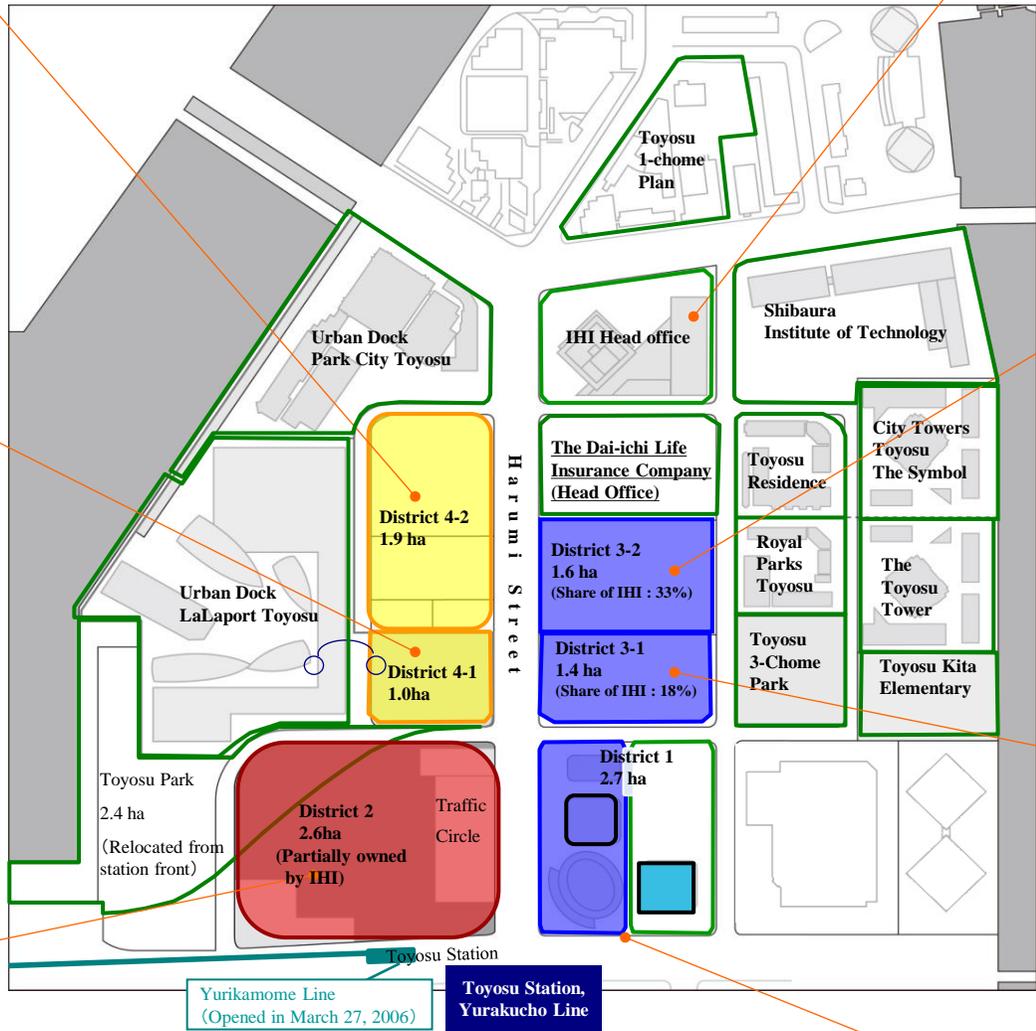
**Toyosu IHI Building**  
 25 floors above ground, Approx. 125m high  
 Gross floor area : 97,617㎡  
 Completed in February 2006



**Toyosu Foresia (IHI & Mitsubishi Estate Company, Ltd.)**  
 16 floors above ground, Approx. 75m high,  
 Gross floor area : 101,503㎡  
 Completed in July 2014



**Toyosu Front (IHI, Mitsubishi Estate Company, Ltd. and Mitsubishi UFJ Trust and Banking Corporation)**  
 15 floors above ground, Approx. 75m high  
 Gross floor area : 106,861㎡  
 Completed in August 2010



Civic Center : Opened in September 2015  
 Fire department office : Completed in June 2016

Property of IHI	Approx. 5ha
-----------------	-------------

- Office Leasing
- Land Leasing
- Office Leasing (Leased land)
- Category 1 Urban Redevelopment Project ※1
- Sold, Donated, Exchanged

**Toyosu Center Building**  
 37 floors above ground, Approx. 165m high  
 Gross floor area : 100,069㎡  
 Completed in October 1992

**Toyosu Center Building Annex**  
 33 floors above ground, Approx. 150m high  
 Gross floor area : 105,448㎡  
 Completed in August 2006

※1 One of the way to redevelop that was defined by Urban Renewal Act.



Forward-looking figures shown in this material with respect to IHI's performance outlooks and other matters are based on management's assumptions and beliefs in light of the information currently available to it, and therefore contain risks and uncertainties. Consequently, you should not place undue reliance on these performance outlooks in making judgments. IHI cautions you that actual results could differ materially from those discussed in these performance outlooks due to a number of important factors. These important factors include political environments in areas in which IHI operates, general economic conditions, and the yen exchange rate including its rate against the US dollar.