

# Financial Results for First Quarter FY2018 (for the year ending March 31, 2019)

**IHI**

August 7, 2018

**IHI Corporation**

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# 1. Consolidated Results for First Quarter FY2018

# 1. Consolidated Results for First Quarter FY2018

## Summary of Financial Results

Note: Average exchange rates for FY2018.1Q US\$ 1.00= ¥108.22

(In billion yen)

	FY2017.1Q	FY2018.1Q	Change
Orders received	290.3	241.6	▲ 48.6
Net sales	402.4	337.1	▲ 65.2
Operating profit	25.4	12.7	▲ 12.7
Ordinary profit	21.8	16.7	▲ 5.0
Profit before income taxes	18.8	16.7	▲ 2.1
Income taxes	▲ 5.7	▲ 9.3	▲ 3.6
Profit attributable to owners of parent	11.7	6.1	▲ 5.5

¥4.3 billion of income taxes for prior periods is included in FY2018.1Q.

In FY2017, the closing date of the fiscal year of certain overseas consolidated subsidiaries has been changed from December 31 to March 31. As a result, for the three months ended June 30, 2017, those overseas consolidated subsidiaries have a six-month accounting period. The effect of these changes was an increase of ¥57.9 billion in net sales and an increase of ¥1.4 billion in operating profit in FY2017.1Q.

# 1. Consolidated Results for First Quarter FY2018

## Financial Results by Segment

### ■ Orders received & Order backlog

(In billion yen)

	Orders received			Order backlog		
	FY2017.1Q	FY2018.1Q	Change	FY2017	FY2018.1Q	Change
Resources, Energy and Environment	73.5	55.5	▲ 18.0	648.5	612.5	▲ 35.9
Social Infrastructure and Offshore Facility	32.7	26.5	▲ 6.1	206.1	205.1	▲ 0.9
Industrial System and General-Purpose Machinery	130.6	115.3	▲ 15.3	161.0	172.6	▲ 11.6
Aero Engine, Space and Defense	46.9	38.6	▲ 8.3	533.0	459.9	▲ 73.0
<b>Total Reportable Segment</b>	<b>283.8</b>	<b>236.0</b>	<b>▲ 47.8</b>	<b>1,548.7</b>	<b>1,450.4</b>	<b>▲ 98.2</b>
Others	18.4	16.1	▲ 2.3	18.4	19.7	▲ 1.3
Adjustment	▲ 12.0	▲ 10.4	1.5	-	-	-
<b>Total</b>	<b>290.3</b>	<b>241.6</b>	<b>▲ 48.6</b>	<b>1,567.1</b>	<b>1,470.1</b>	<b>▲ 96.9</b>

Overseas orders received / order backlog	139.1	90.3	▲ 48.7	625.4	539.5	▲ 85.9
% of Overseas orders received / order backlog	48%	37%	▲ 11%	40%	37%	▲ 3%

# 1. Consolidated Results for First Quarter FY2018

## Financial Results by Segment

### ■ Net sales & Operating profit

(In billion yen)

	Net sales			Operating profit		
	FY2017.1Q	FY2018.1Q	Change	FY2017.1Q	FY2018.1Q	Change
Resources, Energy and Environment	135.8	84.3	▲ 51.5	▲ 0.7	▲ 0.1	0.6
Social Infrastructure and Offshore Facility	29.9	28.5	▲ 1.3	3.3	0.7	▲ 2.5
Industrial System and General-Purpose Machinery	121.1	104.8	▲ 16.2	4.4	4.0	▲ 0.4
Aero Engine, Space and Defense	111.7	117.5	5.8	18.6	9.0	▲ 9.5
<b>Total Reportable Segment</b>	<b>398.6</b>	<b>335.2</b>	<b>▲ 63.3</b>	<b>25.6</b>	<b>13.7</b>	<b>▲ 11.9</b>
Others	12.9	13.5	0.5	▲ 0.4	▲ 0.3	0.1
Adjustment	▲ 9.1	▲ 11.6	▲ 2.5	0.2	▲ 0.6	▲ 0.9
<b>Total</b>	<b>402.4</b>	<b>337.1</b>	<b>▲ 65.2</b>	<b>25.4</b>	<b>12.7</b>	<b>▲ 12.7</b>

Overseas sales	244.8	178.3	▲ 66.4
% of overseas sales	61%	53%	▲ 8%

Regarding the effect to each segment caused by changes of the closing date of the fiscal year of certain overseas consolidated subsidiaries in the previous fiscal year, please refer to segment information found in the consolidated financial report.

# 1. Consolidated Results for First Quarter FY2018

## Financial Results by Segment

- Analysis of change in operating profit from the previous period

(In billion yen)

	Change in net sales	Change in construction profitability	Change in foreign exchange rate	Change in SG&A	Impact of change of FY period	Total
Resources, Energy and Environment	▲ 0.9	0.8		0.6	0.1	0.6
Social Infrastructure and Offshore Facility	▲ 0.3	▲ 2.1		▲ 0.1		▲ 2.5
Industrial System and General-Purpose Machinery	2.4			▲ 1.2	▲ 1.6	▲ 0.4
Aero Engine, Space and Defense	▲ 3.6	▲ 5.0	▲ 0.7	▲ 0.3		▲ 9.6
<b>Total Reportable Segment</b>	<b>▲ 2.4</b>	<b>▲ 6.3</b>	<b>▲ 0.7</b>	<b>▲ 1.0</b>	<b>▲ 1.5</b>	<b>▲ 11.9</b>
Others	0.3	▲ 0.2		▲ 0.1	0.1	0.1
Adjustment		▲ 0.2		▲ 0.7		▲ 0.9
<b>Total</b>	<b>▲ 2.1</b>	<b>▲ 6.7</b>	<b>▲ 0.7</b>	<b>▲ 1.8</b>	<b>▲ 1.4</b>	<b>▲ 12.7</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 First Quarter FY2018

## Non-operating Income / Expenses

IHI

(In billion yen)

	FY2017.1Q	FY2018.1Q	Change
Net interest expenses (incl. dividend income)	0.0	0.0	0.0
Share of profit of entities accounted for using equity method	0.4	3.8	3.3
Foreign exchange gains / losses	0.4	1.6	1.2
Others	▲ 4.5	▲ 1.4	3.0
<b>Non-operating income / expenses</b>	<b>▲ 3.6</b>	<b>3.9</b>	<b>7.6</b>

Change of the rate(US\$) FY2017.1Q ▲0.19yen (beginning 112.19yen→end 112.00yen)  
FY2018 .1Q +4.30yen (beginning 106.24yen→end 110.54yen)

# 1. Consolidated Results for First Quarter FY2018

## Extraordinary Income / Losses

IHI

(In billion yen)

	FY2017.1Q	FY2018.1Q	Change
Extraordinary income	—	—	—
Settlement-related expenses related to boiler facilities in customer's commercial operation	▲ 2.9	—	2.9
Extraordinary losses	▲ 2.9	—	2.9
Extraordinary Income / Losses	▲ 2.9	—	2.9

# 1. Consolidated Results for First Quarter FY2018

## Balance Sheets

(In billion yen)

	As of March 31, 2018	As of June 30, 2018	Change
<b>Total assets (*1)</b>	<b>1,633.4</b>	<b>1,627.4</b>	<b>▲ 5.9</b>
(Trade receivables)	(400.3)	(377.5)	(▲ 22.7)
(Inventories)	(428.5)	(444.1)	(15.6)
<b>Total liabilities (*1)</b>	<b>1,283.2</b>	<b>1,275.9</b>	<b>▲ 7.3</b>
(Trade payables)	(304.9)	(294.9)	(▲ 9.9)
(Advance received)	(177.8)	(179.9)	(2.1)
(Provision for bonuses)	(26.1)	(14.4)	(▲ 11.7)
(Interest-bearing debt) (*2)	(322.2)	(339.5)	(17.2)
<b>Total net assets</b>	<b>350.2</b>	<b>351.5</b>	<b>1.3</b>
Shareholders' equity	313.2	314.5	1.3
Accumulated other comprehensive income	11.3	11.1	▲ 0.1
Non-controlling interests and others	25.6	25.8	0.1
<b>Total liabilities and net assets (*1)</b>	<b>1,633.4</b>	<b>1,627.4</b>	<b>▲ 5.9</b>
<b>D/E ratio(times) (*3)</b>	<b>0.92</b>	<b>0.97</b>	<b>0.05</b>
<b>Equity ratio</b>	<b>19.9%</b>	<b>20.0%</b>	<b>0.1%</b>

(\*1) Balance Sheets as of March 31, 2018 is partly adjusted due to the application of the "Partial Amendments to Accounting Standard for Tax Effect Accounting".

(\*2) Interest-bearing debt includes the amount of lease obligations.  
(as of March 31, 2018: ¥18.2 billion / as of June 30, 2018: ¥17.8 billion)

(\*3) D/E ratio = Interest-bearing debt / net assets

### (1) Cash Flows

(In billion yen)

	FY2017.1Q	FY2018.1Q	Change
<b>Operating activities</b>	<b>10.4</b>	<b>▲ 6.6</b>	<b>▲ 17.1</b>
<b>Investing activities</b>	<b>6.7</b>	<b>▲ 19.6</b>	<b>▲ 26.4</b>
<b>Free cash flows</b>	<b>17.2</b>	<b>▲ 26.3</b>	<b>▲ 43.5</b>
<b>Financing activities</b>	<b>▲ 22.0</b>	<b>9.5</b>	<b>31.5</b>

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

(In billion yen)

	<b>FY2017.1Q</b>	<b>FY2018.1Q</b>
<b>R&amp;D</b>	<b>7.0</b>	<b>7.0</b>
<b>CAPEX</b>	<b>10.1</b>	<b>10.3</b>
<b>Depreciation &amp; Amortization</b>	<b>11.5</b>	<b>10.1</b>

### (3) Overseas Sales by Region

(In billion yen)

	<b>FY2017.1Q</b>	<b>FY2018.1Q</b>
<b>Asia</b>	<b>36.8</b>	<b>33.7</b>
<b>China</b>	<b>32.1</b>	<b>32.3</b>
<b>North America</b>	<b>115.9</b>	<b>79.7</b>
<b>Central and South America</b>	<b>5.5</b>	<b>3.5</b>
<b>Europe</b>	<b>47.2</b>	<b>27.2</b>
<b>Others</b>	<b>6.9</b>	<b>1.7</b>
<b>Total</b>	<b>244.8</b>	<b>178.3</b>
<b>% of overseas sales</b>	<b>61%</b>	<b>53%</b>

## 2. Forecasts of the Consolidated Results for FY2018

## 2. Forecasts of the Consolidated Results for FY2018

### Summary of Forecasts for FY2018

<assumed exchange rate>

US\$ 1.00 = ¥105 (assumed in May , ¥105)

Euro 1.00 = ¥130 (assumed in May , ¥130)

(In billion yen)

	FY2018 Forecast		FY2017 Actual	Change
	In May	In August		Vs. Forecast in May
Orders received	1,500.0	1,500.0	1,505.0	0.0
Net sales	1,500.0	1,500.0	1,590.3	0.0
Operating profit	85.0	85.0	72.2	0.0
Ordinary profit	65.0	65.0	21.4	0.0
Profit attributable to owners of parent	32.0	32.0	8.2	0.0

<For reference> Sensitivity to foreign exchange rates by currency

1 yen per US\$ corresponds to 0.7 billion yen, and per Euro, 0.0 billion yen in operating profit.

## 2. Forecasts of the Consolidated Results for FY2018

### Forecasts for FY2018 by Segment

■ Orders received

(In billion yen)

	FY2018 Forecast (In May)	FY2018 Forecast (In August)	Change
Resources, Energy and Environment	380.0	380.0	0.0
Social Infrastructure and Offshore Facility	140.0	140.0	0.0
Industrial System and General-Purpose Machinery	470.0	470.0	0.0
Aero Engine, Space and Defense	490.0	490.0	0.0
<b>Total Reportable Segment</b>	<b>1,480.0</b>	<b>1,480.0</b>	<b>0.0</b>
Others	70.0	70.0	0.0
Adjustment	▲ 50.0	▲ 50.0	0.0
<b>Total</b>	<b>1,500.0</b>	<b>1,500.0</b>	<b>0.0</b>

## 2. Forecasts of the Consolidated Results for FY2018 Forecasts for FY2018 by Segment

### ■ Net sales & Operating profit

(In billion yen)

	FY2018 Forecast (In May)		FY2018 Forecast (In August)		Change	
	Net sales	Operating profit	Net sales	Operating profit	Net sales	Operating profit
Resources, Energy and Environment	390.0	20.0	390.0	20.0	0.0	0.0
Social Infrastructure and Offshore Facility	150.0	12.0	150.0	12.0	0.0	0.0
Industrial System and General-Purpose Machinery	440.0	22.0	440.0	22.0	0.0	0.0
Aero Engine, Space and Defense	500.0	44.0	500.0	44.0	0.0	0.0
<b>Total Reportable Segment</b>	<b>1,480.0</b>	<b>98.0</b>	<b>1,480.0</b>	<b>98.0</b>	<b>0.0</b>	<b>0.0</b>
Others	70.0	3.0	70.0	3.0	0.0	0.0
Adjustment	▲ 50.0	▲ 16.0	▲ 50.0	▲ 16.0	0.0	0.0
<b>Total</b>	<b>1,500.0</b>	<b>85.0</b>	<b>1,500.0</b>	<b>85.0</b>	<b>0.0</b>	<b>0.0</b>

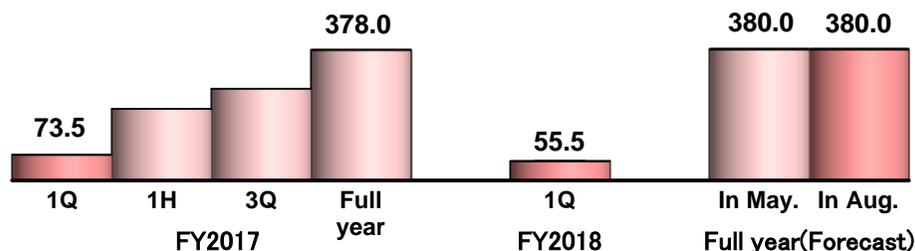
## 3. Financial Results by Segment

# 3. Financial Results by Segment

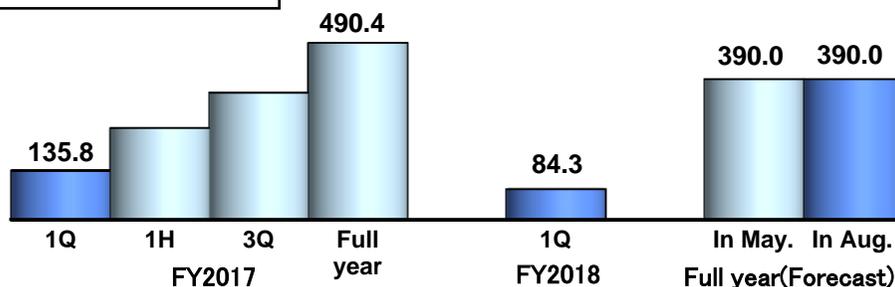
## Resources, Energy and Environment

(In billion yen, accumulated amount)

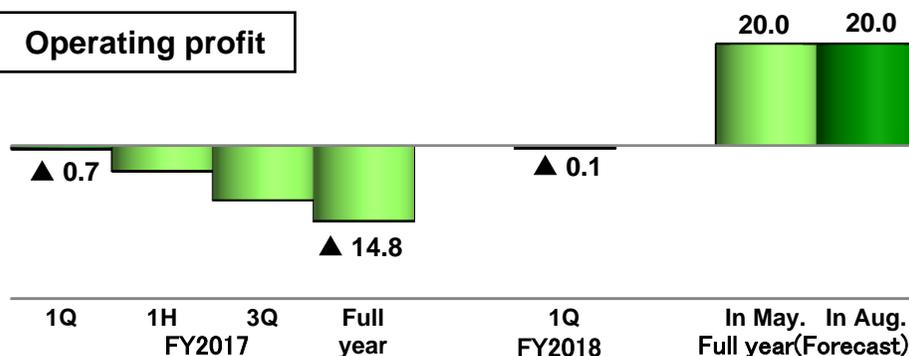
### Orders received



### Net sales



### Operating profit



### <Results by business segment>

#### 【 Orders received 】

Orders received decreased from the previous corresponding period mainly in the Process plants Business.

#### 【 Net sales 】

Net sales decreased owing to a pull back from the progress of large-scale projects in the Process plants Business in FY2017, decreased sales in the Power systems plants for land use Business and the Power systems for land and marine use Business, and partly from the effect of the financial reporting periods unification (hereinafter “FRPU”) in FY2017.

#### 【 Operating profit 】

Operating loss was at the same level as the previous corresponding period, mainly due to improved profitability for the Power systems for land and marine use Business and the Nuclear power Business, and a decrease in selling, general and administrative expenses, despite the above-mentioned decreases of net sales.

### <FY2018 Forecast (vs. In May)>

The forecasts of orders received, net sales and operating profit remain unchanged.

### 3. Financial Results by Segment

## Resources, Energy and Environment

(In billion yen)

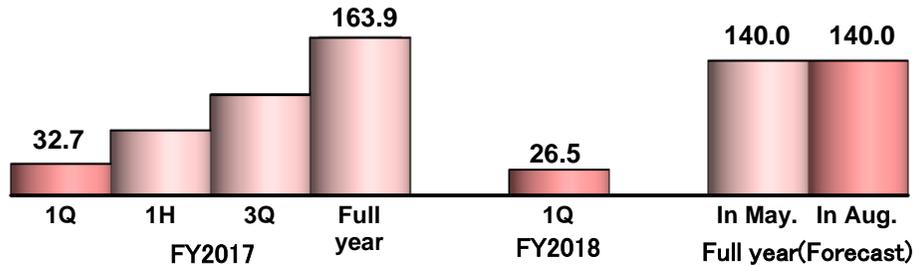
	Orders received		Net sales					
	FY2017 Full year	FY2018 Full year (Forecast)	FY2017				FY2018	
			1Q	1H	3Q	Full year	1Q	Full year (Forecast)
<b>Boilers</b>	130.4	122.0	25.4	70.0	99.8	148.1	27.0	120.0
<b>Power systems plants</b>	35.3	30.0	6.4	11.0	16.7	25.7	2.8	25.0
<b>Power systems for land and marine use</b>	58.4	62.0	14.5	28.5	40.9	58.6	11.7	60.0
<b>Process plants</b>	44.0	55.0	69.1	99.7	126.3	149.1	22.2	70.0
<b>Nuclear power</b>	21.9	28.0	5.2	10.3	16.9	33.8	5.0	40.0

# 3. Financial Results by Segment

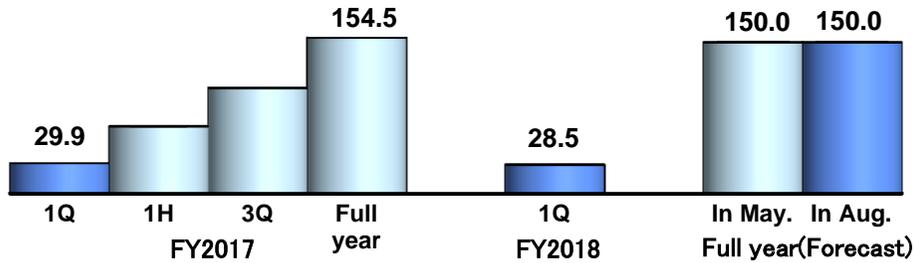
## Social Infrastructure and Offshore Facility

(In billion yen, accumulated amount)

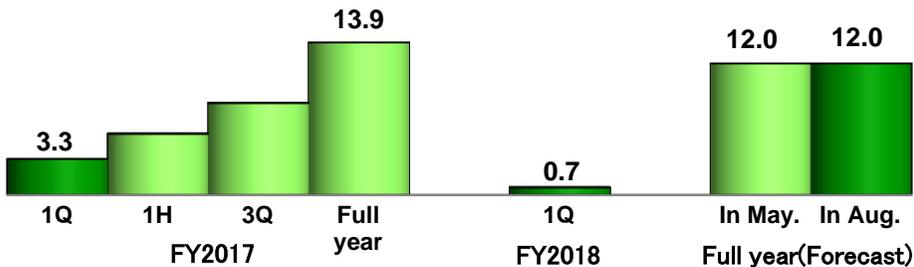
### Orders received



### Net sales



### Operating Profit



### <Results by business segment>

#### 【 Orders received 】

Orders received decreased from the previous corresponding period in the Bridges/water gates Business.

#### 【 Net sales 】

Net sales decreased in the Shield systems Business and the F-LNG/Offshore structures Business, while increased in the Bridges/water gates Business.

#### 【 Operating profit 】

Operating profit decreased in the Shield systems Business and the Transport systems Business.

### <FY2018 Forecast (vs. In May)>

The forecasts of orders received, net sales and operating profit remain unchanged.

### 3. Financial Results by Segment

## Social Infrastructure and Offshore Facility

(In billion yen)

	Orders received		Net sales					
	FY2017	FY2018	FY2017				FY2018	
	Full year	Full year (Forecast)	1Q	1H	3Q	Full year	1Q	Full year (Forecast)
Bridges/water gates	103.1	70.0	12.8	26.7	42.7	67.3	15.2	80.0
Shield systems	10.2	20.0	5.9	11.5	18.9	24.4	4.0	18.5
F-LNG	▲ 0.7	-	2.4	9.1	10.3	11.2	0.9	1.5
Urban development	16.2	17.0	4.2	8.9	12.5	16.9	3.7	17.0

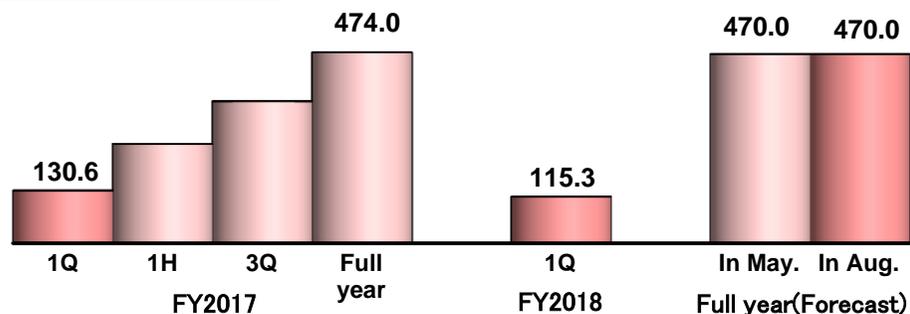
For related information of “Urban development” in Toyosu, please refer to <Appendices> on page 33, 34.

# 3. Financial Results by Segment

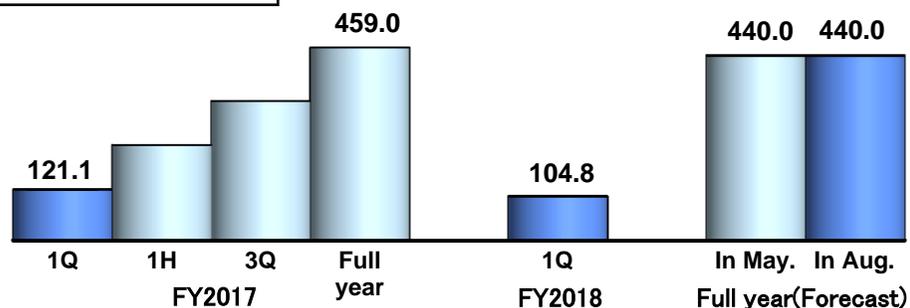
## Industrial System and General-Purpose Machinery

(In billion yen, accumulated amount)

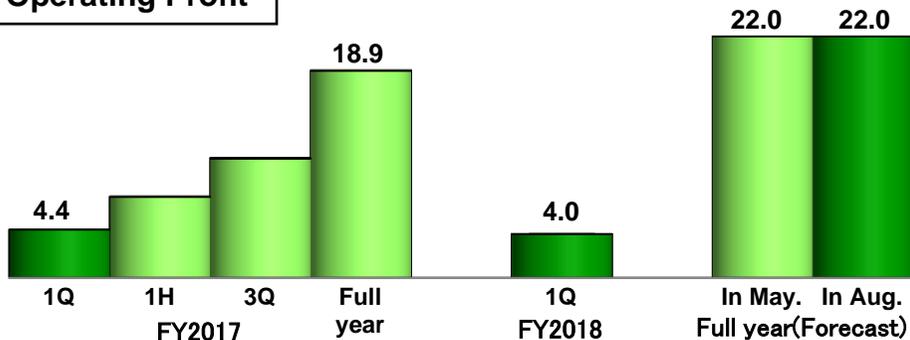
### Orders received



### Net sales



### Operating Profit



### <Results by business segment>

#### 【 Orders received 】

Orders received decreased from the previous corresponding period in the Vehicular turbochargers Business and the Thermal and surface treatment Business.

#### 【 Net sales 】

Net sales decreased for the segment over all, while the net sales increased in the Vehicular turbochargers Business, the Thermal and surface treatment Business and so on excluding the effect of FRPU in FY2017.

#### <Number of vehicular turbochargers delivered>

(1,000 Units)

	1Q	Full Year
FY2017	2,650	7,900
FY2018	1,810	7,200

※ The effect of FRPU is included in the units of FY2017.

#### 【 Operating profit 】

Operating profit was at the same level as the previous corresponding period, mainly due to the effect of FRPU in FY2017 and an increase in selling, general and administrative expenses, despite the impact of an increase of net sales in the Thermal and surface treatment Business and so on.

#### <FY2018 Forecast (vs. In May)>

The forecasts of orders received, net sales and operating profit remain unchanged.

### 3. Financial Results by Segment

## Industrial System and General-Purpose Machinery

(In billion yen)

	Orders received		Net sales					
	FY2017 Full year	FY2018 Full year (Forecast)	FY2017			Full year	FY2018	
			1Q	1H	3Q		1Q	Full year (Forecast)
Transport machineries	25.2	39.0	3.2	10.5	17.8	28.3	5.0	25.0
Parking	51.3	47.0	7.8	17.1	28.9	42.8	7.7	46.0
Thermal and surface treatment	50.3	42.0	13.2	23.0	32.6	43.8	11.1	40.0
Vehicular turbochargers	220.1	195.0	69.1	117.9	166.4	220.5	51.6	195.0
Rotating machineries	48.1	54.0	8.2	18.8	29.8	43.5	10.6	50.0

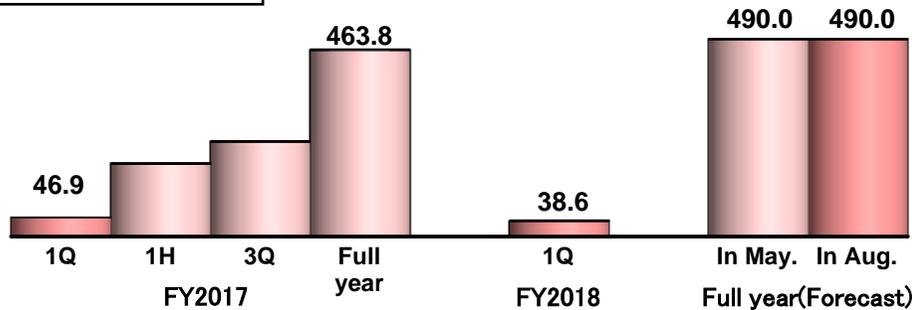
For details of “Vehicular turbochargers”, please refer to <Appendices> on page 32.

# 3. Financial Results by Segment

## Aero Engine, Space and Defense

(In billion yen, accumulated amount)

### Orders received



### <Results by business segment>

#### 【 Orders received 】

Orders received decreased from the previous corresponding period in the aero engines for Japan Ministry of Defense.

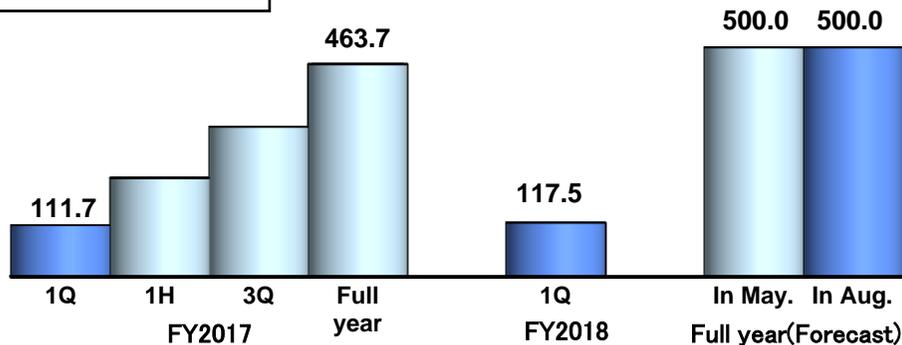
#### 【 Net sales 】

Net sales increased in the Civil aero engines Business.

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

	(Units)	
	1Q	Full Year
FY2017	343	1,206
FY2018	390	1,700

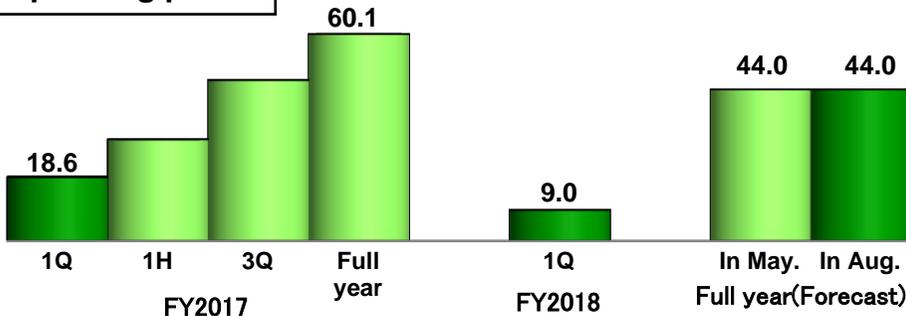
### Net sales



#### 【 Operating profit 】

Operating profit decreased mainly due to the effect of sales increase in the new PW1100G engine and expenses increase of maintenance programs.

### Operating profit



#### <FY2018 Forecast (vs. In May)>

The forecasts of orders received, net sales and operating profit remain unchanged.

### 3. Financial Results by Segment

## Aero Engine, Space and Defense

(In billion yen)

	Orders received		Net sales					
	FY2017	FY2018	FY2017				FY2018	
	Full year	Full year (Forecast)	1Q	1H	3Q	Full year	1Q	Full year (Forecast)
Civil aero engines	319.1	340.0	69.7	141.3	216.6	281.0	73.1	325.0

For details of "Civil aero engines", please refer to <Appendices> on page 31.

# <Appendices>

- Progress in large overseas projects
- Topics in the First quarter under review
- Aero engines
- Vehicular turbochargers
- Urban development

## Elba Liquefaction Project



Expected Completion Image



As of end of June 2018

### <Status>

As of the end of June 2018, installation works of MMLS #1~7 and mechanical, electrical, and process control works of BOP are ongoing. Progress of Engineering is 100%, Procurement is 97.2%, Construction is 71.7%, Commissioning is 5.4%, and Overall Project is 71.2%.

### <Key milestones>

March 2016: Contract Award  
 November 2016: FERC Approval for the commencement of construction  
 February 2017: Delivery commencement of MMLS #1 module  
 November 2018: Substantial Completion of MMLS #1 and BOP  
 August 2019: Substantial Completion of all facilities

### <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

**MMLS:** Movable Modular Liquefaction System

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

## Jimah East Power coal fired power plant



Expected Completion Image



As of end of June 2018

### <Status>

As of end of June 2018, erections of #1 Misc. piping and ESP and #2 steel structure and pressure parts are in progress. #1 Power receiving has been completed at the beginning of June. For boiler portion, 93% of engineering, 96% of procurement, 66% of erection and 15% of commissioning activities were completed. As total 89% was completed.

### <Key Milestones>

Aug 2014: EPC Contract	Oct 2018: Initial Firing(#1)
Jan 2017: Boiler Erection Start(#1)	Apr 2019: Initial Firing(#2)
Jul 2017: Boiler Erection Start(#2)	Jun 2019: COD (#1)
Apr 2018: Hydro Test(#1)	Dec 2019: COD (#2)
Nov 2018: Hydro Test(#2)	

### <Project Brief>

- Contract: Full turn key contract for ultra-supercritical boiler for Jimah East Power Sdn. Bhd. (IPP)
- Site: Jimah, Negeri Sembilan, Malaysia
- Scope: Engineering, Procurement, Construction and Commissioning of Ultra-supercritical boiler

## Construction Work Begins on Additional Above-ground LNG Storage Tank for Hitachi LNG Terminal

On April 1, 2018, the joint venture between IHI and Kajima Corporation began full-scale work on an additional above-ground LNG storage tank, with a storage capacity of 230,000 m<sup>3</sup>, at the Hitachi LNG Terminal. The engineering, procurement and construction contract for this project was awarded by Tokyo Gas Engineering Solutions Corporation. The objective of this work is to strengthen the structure for secure and stable supply of energy, which will contribute to the energy security of the entire Kanto area.

With global demand for energy rising steadily, the IHI Group will continue to actively pursue initiatives to ensure stable supply of environmentally-friendly energy going forward.



<Expected Completion Image>

## Establishment of strategic business partnership with Italian Astaldi S.p.A.

In May 2018, IHI and IHI's group company IHI Infrastructure Systems Co., Ltd., (IIS) signed the Global Partnership Contract with Italian Astaldi S.p.A. (ASTALDI). Simultaneously, IHI has entered into the Investment Agreement with FINAST S.r.l. which is majority shareholder of ASTALDI. Investment Agreement will become effective subject to satisfaction of conditions precedent agreed by parties.

ASTALDI is the second largest contractor in Italy and well known its wide experience of projects in the world and technological capabilities in Infrastructure especially roads, bridges, tunnels, and railways field.

IHI and IIS, through the business partnership, aim at leveraging on each company's complementary business strengths and skills such as IHI group's engineering capabilities of bridge construction and ASTALDI's rich experience of BOT/PPP projects and capabilities of project operations, both in terms of geographical positioning and technological know-how, to enhance ASTALDI and IHI competitive positioning in the global infrastructure market.



<Expected Completion Image of Braila Bridge in Romania>  
(Order jointly received with Astaldi)

\*Source: National Company for the Administration of Road Infrastructure, Romania

## Demonstration of World's First Ammonia Co-fired 2,000 kW-class Gas Turbine / Successfully Generated 1 kW of Power through a Fuel Cell System that Uses Ammonia as Fuel

In March 2018, IHI conducted co-firing testing of natural gas and ammonia, which is expected to be used as a new fuel in the shift to a low-carbon society. By successfully achieving a co-firing ratio of 20% (ratio in calorie), a world first for a 2,000 kW-class gas turbine, the IHI Group has established the prospect of practical application of combustion technology using ammonia as a fuel for gas turbines. In addition, the IHI Group successfully built a solid oxide fuel cell (SOFC)(\*1) system that supplies ammonia directly as a fuel, and in March 2018 succeeded in generating of electricity in the 1 kW class.

The IHI Group is aiming to construct a value chain that connects activities ranging from producing ammonia to using it, and, with the support of the Cross-ministerial Strategic Innovation Promotion Program (SIP) of the Japanese Cabinet Office's Council for Science, Technology and Innovation, is working on initiatives to develop combustion technology for gas turbines and coal-fired boilers that use ammonia as fuel, as well as on building SOFC systems. In addition, through our business activities we will contribute to the achievement of Sustainable Development Goals (SDGs).

(\*1) Solid oxide fuel cell (SOFC):

A fuel cell operating at a temperature of 700 to 900° C that uses an oxide ceramic as a constituent material (source: Japan Science and Technology Agency website)



<Ammonia SOFC>

## IHI was Selected as “2018 Competitive IT Strategy Company”

As it executes its medium-term management plan “Group Management Policies 2016,” IHI aims to strengthen earnings foundations by using ICT technology such as IoT and AI to enhance its products, services and manufacturing technology, enabling it to transform the business model and create new value for customers. The reception for this attitude and these initiatives has been positive, and IHI has been selected as one of the “Competitive IT Strategy Companies” in the “2018 Competitive IT Strategy Company Stock Selection”(\*1). Following on from 2016, this is the second time that IHI has been chosen.

By actively utilizing ICT technology such as IoT and AI going forward, the IHI Group will work on initiatives to strengthen its manufacturing capabilities, and enhance the value added for the customer by its products and services. In this way, as well as contributing to the development of society through technology, we provide new value to the customer.

(\*1) Competitive IT Strategy Company Stock Selection:

The Ministry of Economy, Trade and Industry and the Tokyo Stock Exchange (TSE) jointly select 32 TSE-listed companies from 33 of the TSE industry sectors, based on their active use of IT to bring about business innovation and strengthen competitiveness.



## (1) Net sales of civil aero engines

(In billion yen)

	Actual									Forecast	
	'12	'13	'14	'15	'16	FY2017				FY2018	
						1Q	1H	3Q	Full Year	1Q	Full Year
Net sales	169.8	226.0	267.0	299.1	291.5	69.7	141.3	216.6	281.0	73.1	325.0

## (2) Number of civil aero engines delivered

(Units)

	Actual (accumulated)										Main loading
	'09	'10	'11	'12	'13	'14	'15	'16	'17	'18/1Q	
V2500	4,168	4,551	4,980	5,468	5,969	6,469	6,896	7,236	7,508	7,568	Airbus A319/320/321
GE90	1,071	1,223	1,399	1,589	1,806	2,039	2,257	2,457	2,617	2,641	Boeing B777
CF34	2,604	2,919	3,242	3,548	3,820	4,156	4,471	4,821	5,085	5,144	For regional jet (70 to 110 seats)
GE <sub>nx</sub>			118	259	468	751	1,035	1,295	1,542	1,600	Boeing B787/B747-8
PW1100G							16	148	398	553	Airbus A320Neo
Passport20									13	31	Bombardier Global7000/8000
<b>Total</b>	<b>7,843</b>	<b>8,693</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>17,537</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										Forecast	
	'12	'13	'14	'15	'16	FY2017				FY2018		
						1Q	1H	3Q	Full Year	1Q	Full Year	
Japan	33.9	35.3	37.5	34.6	38.9	10.1	19.6	29.6	39.8	10.7	38.0	
Asia	24.8	29.8	27.5	21.6	15.8	2.8	5.7	8.7	11.7	2.6	11.0	
China	18.1	23.4	24.3	24.9	48.5	21.5	38.3	53.3	71.9	17.5	69.0	
North America	1.3	1.6	1.8	2.4	3.3	0.7	1.9	4.9	8.4	2.8	12.0	
Central and South America	0.0	0.0	0.7	3.4	6.1	1.1	2.8	5.1	7.4	2.1	9.0	
Europe	43.2	60.2	75.6	74.3	61.7	32.7	49.2	64.7	81.1	15.6	56.0	
Others	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
<b>Total</b>	<b>121.6</b>	<b>150.7</b>	<b>167.7</b>	<b>161.6</b>	<b>174.6</b>	<b>69.1</b>	<b>117.9</b>	<b>166.4</b>	<b>220.5</b>	<b>51.6</b>	<b>195.0</b>	

## (1) Lease revenue in Toyosu

(In billion yen)

	Actual										Forecast	
	'12	'13	'14	'15	'16	FY2017				FY2018		
						1Q	1H	3Q	Full Year	1Q	Full Year	
Lease revenue	9.2	9.1	9.3	10.1	9.3	2.3	4.6	6.9	9.2	2.3	9.3	

## (2) Lease revenue and expense in Toyosu (FY2018.1Q )

(In billion yen)

	Lease revenue	Lease expense		Lease income
		Depreciation	Others	
FY2018.1Q	2.3	0.9	0.6	0.7

# Development Plan for Toyosu 1 to 3 chome Area

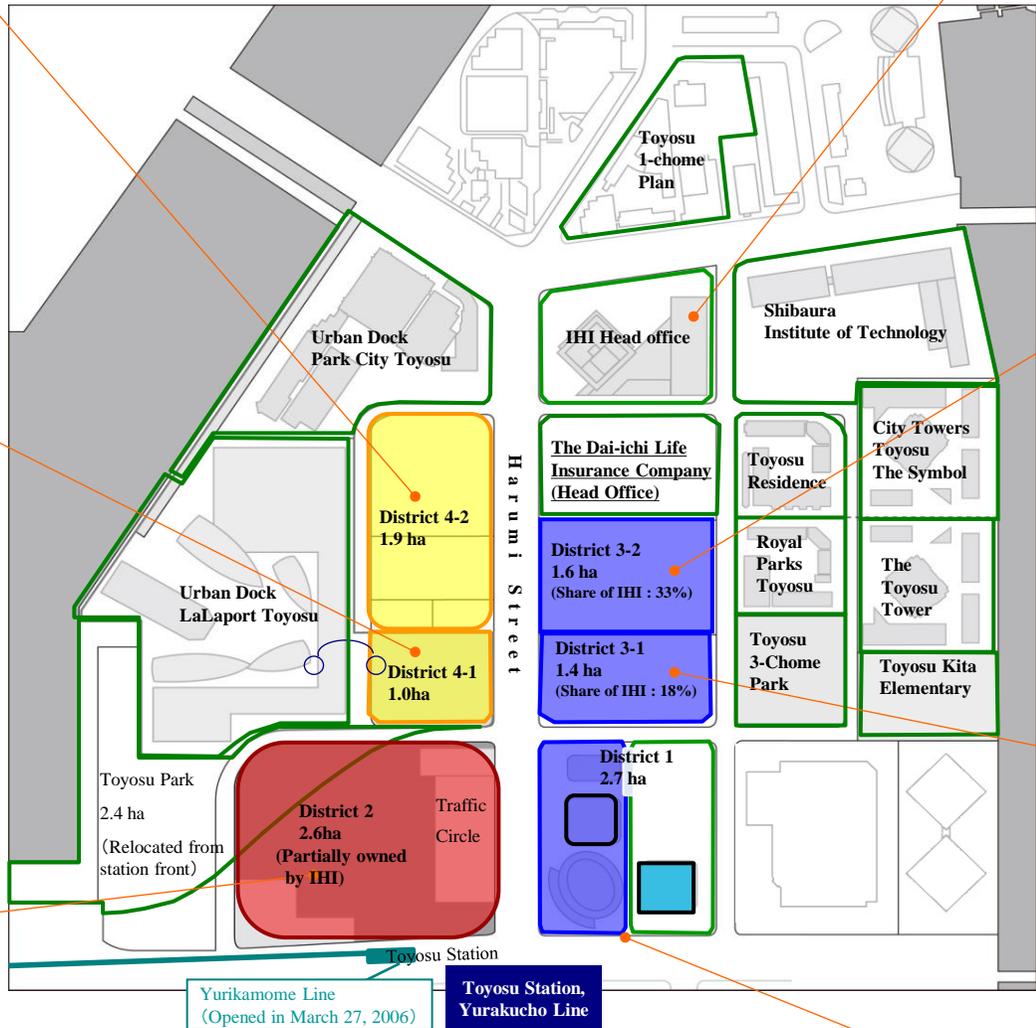
**Kindergarten, Nursery school, Café, Marriage ceremonial hall.**  
 Site area : 19,492㎡  
 Completed in March 2010 to February 2011



**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㎡  
 Scheduled for completion in April 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



**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



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

Property of IHI	Approx. 5ha
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- Office Leasing
- Land Leasing
- Office Leasing (Leased land)
- Category 1 Urban Redevelopment Project ※1
- Sold, Donated, Exchanged

※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.