# Financial Results for Second Quarter FY2017 (for the year ending March 31, 2018)



November 1, 2017

**IHI** Corporation

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1. Consolidated Results for Second Quarter FY2017



## 1. Consolidated Results for Second Quarter FY2017 Summary of Financial Results



Note: Average exchange rates for FY2017.2Q US\$ 1.00= ¥111.14

(In billion yen)

	FY2016.2Q	FY2017.2Q	Change
Orders received	640.2	715.1	74.8
Net sales	691.7	773.4	81.6
Operating profit	11.9	34.6	22.6
Ordinary profit	5.0	19.5	14.4
Profit before income taxes	5.0	18.2	13.1
Profit(loss) attributable to owners of parent	▲ 5.2	6.8	12.1

As same as FY2016, 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 six months ended September 30, 2017, those overseas consolidated subsidiaries have a nine-month accounting period. The impact of these changes was an increase of ¥57.9 billion in net sales and an increase of ¥1.4 billion in operating profit (an increase of ¥25.2 billion in net sales and an increase of ¥2.7 billion in operating profit in previous fiscal year).



Orders received & Order backlog

	Orders received			(	Order backlog	ı
	FY2016.2Q	FY2017.2Q	Change	FY2016	FY2017.2Q	Change
Resources, Energy and Environment	176.3	207.4	31.1	752.3	708.9	<b>▲</b> 43.4
Social Infrastructure and Offshore Facility	73.6	67.5	<b>▲ 6.1</b>	196.1	194.3	▲ 1.8
Industrial System and General- Purpose Machinery	211.4	246.3	34.8	148.4	158.2	9.8
Aero Engine, Space and Defense	167.1	181.1	14.0	511.0	485.5	▲ 25.5
Total Reportable Segment	628.5	702.4	73.8	1,608.0	1,547.1	▲ 60.9
Others	34.2	38.4	4.1	17.2	24.1	6.8
Adjustment	▲ 22.5	▲ 25.7	▲ 3.1	-	-	-
Total	640.2	715.1	74.8	1,625.3	1,571.2	▲ 54.0
Overseas orders received / order backlog	299.7	411.8	112.0	591.2	569.7	▲ 21.5
% of Overseas orders received / order backlog	47%	58%	11%	36%	36%	0%



■ Net sales & Operating profit

(In billion yen)

		Net sales		Oį	perating pro	fit
	FY2016.2Q	FY2017.2Q	Change	FY2016.2Q	FY2017.2Q	Change
Resources, Energy and Environment	208.5	253.9	45.4	▲ 6.8	▲ 5.0	1.7
Social Infrastructure and Offshore Facility	66.6	66.6	0.0	▲ 19.9	5.6	25.5
Industrial System and General- Purpose Machinery	202.9	227.1	24.1	7.9	7.4	▲ 0.4
Aero Engine, Space and Defense	205.9	215.4	9.5	31.5	29.5	▲ 1.9
Total Reportable Segment	684.1	763.2	79.1	12.6	37.5	24.8
Others	32.2	30.1	▲ 2.1	0.4	▲ 0.2	▲ 0.7
Adjustment	▲ 24.5	▲ 19.8	4.7	▲ 1.1	▲ 2.6	<b>▲ 1.5</b>
Total	691.7	773.4	81.6	11.9	34.6	22.6

Please refer to segment information found in the consolidated financial report regarding the impacts to each segment caused by changes to the closing date of the fiscal year of certain overseas consolidated subsidiaries.



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	2.2	<b>▲ 1.3</b>	0.8	0.7	▲ 0.7	1.7
Social Infrastructure and Offshore Facility		25.5	0.4	▲ 0.4		25.5
Industrial System and General-Purpose Machinery	1.8	▲ 1.4		▲ 0.4	▲ 0.4	▲ 0.4
Aero Engine, Space and Defense	1.0	▲ 2.5	1.5	<b>▲ 1.9</b>		▲ 1.9
Total Reportable Segment	5.0	20.3	2.7	▲ 2.0	▲ 1.1	24.8
Others	▲ 0.2	▲ 0.2		▲ 0.1	▲ 0.2	▲ 0.7
Adjustment		▲ 2.1		0.6		▲ 1.5
Total	4.8	18.0	2.7	<b>▲ 1.5</b>	<b>A</b> 1.3	22.6

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



## Deterioration of profitability in the projects underway in North America in the Process plants Business

### <Factors of deterioration of profitability>

- Increase of procurement and construction costs due to increased amount of materials from the initial estimation.
- The review of the whole plan of construction was needed due to delayed process schedule caused by increased amount of materials, and additional catch-up costs were recorded in this second quarter.

### **<Countermeasures>**

- Detailed progress management including outsourcing management through using installation construction plans that incorporate process improvements.
- Reinforcement of future project management system by assigning experts who have thorough knowledge of on-site construction in foreign countries.

## 1. Consolidated Results for Second Quarter FY2017 Non-operating Income / Expenses and Extraordinary Income / Losses



## (1) Non-operating Income / Expenses

(In billion yen)

	FY2016.2Q	FY2017.2Q	Change	Note
Net interest expense (incl. dividend income)	▲ 0.3	0.0	0.2	
Share of profit / loss of entities accounted for using equity method	▲ 0.4	0.0	0.3	
Foreign exchange gains / losses	<b>▲</b> 6.4	0.3	6.8	
Others	0.3	▲ 15.3	▲ 15.6	FY2016.2Q Reversal of accrued expenses for delayed delivery +4.0 FY2017.2Q Payments for contract adjustments for civil aero engines ▲6.4(*) Expenses for delayed delivery ▲4.7
Non-operating income / expenses	<b>▲</b> 6.8	▲ 15.0	▲ 8.1	

<sup>(\*)</sup> As a result of one-time expenses arising in relation to customer contracts for engine programs in which IHI is participating, IHI recorded these program expenses.

## (2) Extraordinary Income / Losses

(In billion yen)

<u> </u>				
	FY2016.2Q	FY2017.2Q	Change	Note
Extraordinary income	_	1.5	1.5	FY2017.2Q Gain on transfer of business +1.5
Extraordinary losses	_	▲ 2.9	▲ 2.9	FY2017.2Q Settlement-related expenses related to boiler facilities in customer's commercial operation ▲2.9
Extraordinary Income / Losses	_	<b>▲ 1.3</b>	<b>1.3</b>	

Change of the year-end rate(USD) FY2016.2Q ▲11.56yen (beginning 112.68yen→end 101.12yen) FY2017.2Q +0.54yen (beginning 112.19yen→end 112.73yen)

## Consolidated Results for Second Quarter FY2017 Balance Sheets



(In billion yen)

	As of March 31, 2017	As of September 30, 2017	Change
Total assets	1,692.8	1,660.1	▲ 32.6
(Trade receivables)	(403.0)	(373.6)	(▲ 29.4)
(Inventories)	(417.2)	(453.2)	(35.9)
Total liabilities	1,355.2	1,312.0	▲ 43.1
(Trade payables)	(285.9)	(292.4)	(6.5)
(Advance received)	(208.9)	(197.5)	(▲ 11.3)
(Interest-bearing debt)	(371.9)	(335.6)	(▲ 36.2)
Total net assets	337.6	348.1	10.4
Shareholders' equity	309.9	316.4	6.4
Accumulated other comprehensive income	8.1	11.3	3.1
Total liabilities and net assets	1,692.8	1,660.1	<b>▲ 32.6</b>
D/E ratio (times)	1.10	0.96	<b>▲ 0.14</b>
Equity ratio	18.8%	19.7%	1.0%

Note: Interest-bearing debt includes the amount of lease obligations.

(as of March 31, 2017: 20.3 billion yen / as of September 30, 2017: 18.5 billion yen )

## 1. Consolidated Results for Second Quarter FY2017Cash Flows



	FY2016.2Q	FY2017.2Q	Change
Operating activities	42.3	43.1	0.8
Investing activities	▲ 30.4	<b>▲ 4.6</b>	25.7
Free cash flows	11.8	38.4	26.5
Financing activities	▲ 30.3	<b>▲ 40.1</b>	▲ 9.7

## 1. Consolidated Results for Second Quarter FY2017Supplementary Information



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

(In billion yen)

	FY2016.2Q	FY2017.2Q
R&D	14.6	15.0
CAPEX	23.9	20.5
Depreciation & Amortization	22.4	21.9

## (2) Overseas Sales by Region

	FY2016.2Q	FY2017.2Q
Asia	95.0	80.7
China	37.2	56.6
North America	154.5	202.8
Central and South America	14.3	12.7
Europe	62.3	75.1
Others	20.7	15.9
Total	384.2	444.0
% of overseas sales	56%	57%

2. Forecasts of the Consolidated Results for FY2017



## 2. Forecasts of the Consolidated Results for FY2017Summary of Forecasts for FY2017



### <assumed exchange rate>

US\$  $1.00 = \pm 105$  (assumed in August,  $\pm 105$ )

Euro 1.00 =¥120 (assumed in August , ¥120)

(In billion yen)

		FY2017 Forecast		Change
	In August	In November	Actual	Vs. Forecast in August
Orders received	1,500.0	1,500.0	1,389.8	0.0
Net sales	1,550.0	1,550.0	1,486.3	0.0
Operating profit	65.0	65.0	47.3	0.0
Ordinary profit	57.0	57.0	22.0	0.0
Profit attributable to owners of parent	23.0	23.0	5.2	0.0

<sup>&</sup>lt;For reference> Sensitivity to foreign exchange rates by currency

From FY2016, the IHI Group started to roll out a change to the fiscal-year closing date of overseas consolidated subsidiaries from December 31 to March 31. Also in this fiscal year, certain overseas consolidated subsidiaries will have a fiscal year of fifteen months from January 1, 2017 until March 31, 2018.

Also, from the fiscal year ending March 31, 2018, IHI and some of its consolidated subsidiaries in Japan have changed the depreciation method for property, plant and equipment from the declining-balance method to the straight-line method.

<sup>1</sup> yen per US\$ corresponds to 0.5 billion yen, and per Euro, 0.0 billion yen in operating profit.

# 2. Forecasts of the Consolidated Results for FY2017Forecasts for FY2017 by Segment



Orders received

	FY2017 Forecast (In August)	FY2017 Forecast (In November)	Change
Resources, Energy and Environment	460.0	460.0	0.0
Social Infrastructure and Offshore Facility	150.0	150.0	0.0
Industrial System and General- Purpose Machinery	450.0	450.0	0.0
Aero Engine, Space and Defense	410.0	440.0	30.0
Total Reportable Segment	1,470.0	1,500.0	30.0
Others	70.0	70.0	0.0
Adjustment	<b>▲ 40.0</b>	▲ 70.0	▲ 30.0
Total	1,500.0	1,500.0	0.0

# 2. Forecasts of the Consolidated Results for FY2017 Forecasts for FY2017 by Segment



Net sales & Operating profit

	FY2017 I (In Aug	Forecast gust)	FY2017   (In Nov	Forecast ember)	Cha	nge
	Net sales	Operating profit	Net sales	Operating profit	Net sales	Operating profit
Resources, Energy and Environment	530.0	16.0	500.0	5.0	▲ 30.0	<b>▲ 11.0</b>
Social Infrastructure and Offshore Facility	160.0	9.0	160.0	11.0	0.0	2.0
Industrial System and General- Purpose Machinery	440.0	13.0	440.0	15.0	0.0	2.0
Aero Engine, Space and Defense	440.0	39.0	470.0	46.0	30.0	7.0
Total Reportable Segment	1,570.0	77.0	1,570.0	77.0	0.0	0.0
Others	70.0	2.0	70.0	2.0	0.0	0.0
Adjustment	▲ 90.0	▲ 14.0	▲ 90.0	▲ 14.0	0.0	0.0
Total	1,550.0	65.0	1,550.0	65.0	0.0	0.0

## 2. Forecasts of the Consolidated Results for FY2017 Forecasts for FY2017 by Segment



Analysis of change in operating profit of forecasts(in August VS in November)

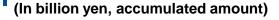
	Change in net sales	Change in construction profitability	Change in foreign exchange rate	Change in SG&A	Total
Resources, Energy and Environment	<b>▲ 2.0</b>	▲ 9.0			<b>▲ 11.0</b>
Social Infrastructure and Offshore Facility		2.0			2.0
Industrial System and General-Purpose Machinery		2.0			2.0
Aero Engine, Space and Defense	5.0		2.0		7.0
Total Reportable Segment	3.0	▲ 5.0	2.0	0.0	0.0
Others					0.0
Adjustment					0.0
Total	3.0	▲ 5.0	2.0	0.0	0.0

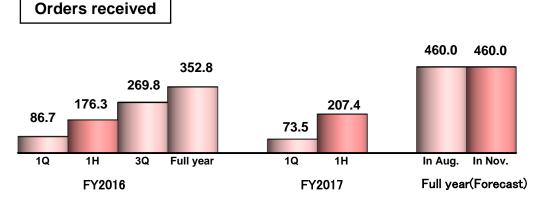
## 3. Financial Results by Segment

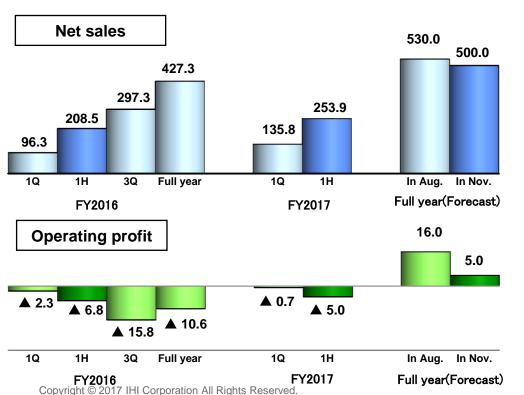


# 3. Financial Results by Segment Resources, Energy and Environment









### <Results by business segment>

#### [ Orders received]

Orders received increased from the previous corresponding period in the Boiler Business, while declined in the Process plants Business and the Nuclear power Business.

#### [ Net sales]

Sales increased owing to the progress of large-scale projects in the Process plants Business, and increased sales in the Boiler Business, the Nuclear power Business and the Power systems for land and marine use Business, and partly from the effect of the financial reporting periods unification (hereinafter "FRPU").

#### [ Operating profit ]

There was a reduced deficit from the previous corresponding period due to solving the issue of the deterioration of profitability in the Boiler Business and the above-mentioned increases in sales, despite the recording of additional costs in projects underway in North America in the Process plants Business.

### <FY2017 Forecast (vs. In August)>

Orders received remain unchanged.

Net sales and operating profit are expected to decrease mainly due to review of process schedule of some construction projects, the deterioration of profitability in the Process plants Business and so on.

# 3. Financial Results by Segment Resources, Energy and Environment



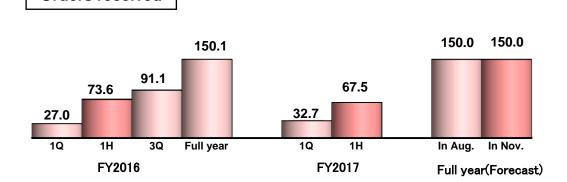
	Orders r	eceived				Net sale	es		
	FY2016	FY2017		FY	2016			FY2017	
	Full year	Full year (Forecast)	1Q	1H	3Q	Full year	1Q	1H	Full year (Forecast)
Boiler	58.3	130.0	24.5	60.9	86.1	112.0	25.4	70.0	140.0
Power system plants	19.0	54.0	5.8	10.4	14.0	18.9	6.4	11.0	34.0
Power systems for land and marine use	61.1	64.0	13.3	26.4	38.8	58.3	14.5	28.5	62.0
Process plants	73.0	91.0	21.5	48.6	62.9	94.3	69.1	99.7	140.0
Nuclear power	55.6	27.0	2.2	6.9	12.7	30.1	5.2	10.3	39.0

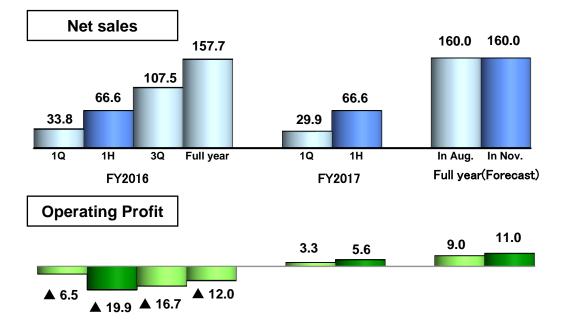
## 3. Financial Results by Segment Social Infrastructure and Offshore Facility





Orders received





1Q

1H

FY2017

In Aug. In Nov.

Full vear(Forecast)

### <Results by business segment>

#### [ Orders received]

Orders received declined from the previous corresponding period in the Shield systems Business and so on.

#### [ Net sales]

Sales were at the same level as the previous corresponding period, due to an increase in sales owing to effects of integration and construction progress in the Shield systems Business, offsetting declines in the Bridge/water gate Business.

#### [ Operating profit ]

Operating profit was in the black mainly as a result of eliminating the F-LNG deficit recorded in the previous corresponding period, and so on.

### <FY2017 Forecast (vs. In August)>

The forecasts of orders received and sales remain unchanged.

Operating profit is expected to increase due to the profitability improvement in each Business.

Full year

**3Q** 

FY2016

1H

1Q

## 3. Financial Results by Segment Social Infrastructure and Offshore Facility



(In billion yen)

	Orders r	eceived				Net sal	es		
	FY2016	FY2017		FY	2016			FY2017	
	Full year	Full year (Forecast)	1Q	1H	3Q	Full year	1Q	1H	Full year (Forecast)
Bridge/Water gate	71.0	70.0	15.0	30.6	44.9	67.2	12.8	26.7	70.0
F-LNG	▲ 1.7	▲ 1.0	8.0	10.7	14.6	18.4	2.4	9.1	12.0
Urban development	15.1	17.0	3.4	7.1	10.6	14.2	4.2	8.9	17.0

For related information of "Urban development" in Toyosu, please refer to <Appendices> on page 34, 35.

## 3. Financial Results by Segment **Industrial System and General-Purpose Machinery**

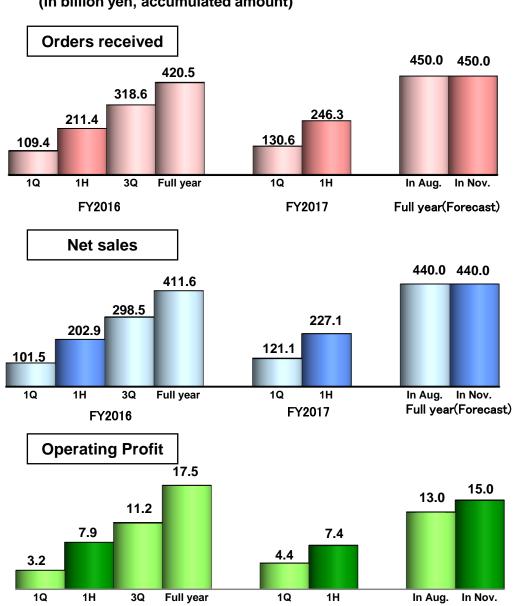
Full year(Forecast)



(In billion yen, accumulated amount)

FY2016

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FY2017

### <Results by business segment>

#### [ Orders received]

Increases in the Vehicular turbocharger Business and the Thermal and surface treatment Business were partially offset by the impact from a transfer of the Construction machinery Business.

#### Net sales

Sales increased owing to increases in the number of units sold in China for the Vehicular turbocharger Business, the effect of FRPU, and so on.

< Number of vehicular turbochargers delivered>

(10,000 Units)

	2Q	Full Year
FY2016	293	610
FY2017	433	770

#### [ Operating profit ]

Operating profit was at the same level as the previous corresponding period, mainly due to the deterioration of profitability in the Rotating machinery Business, despite the above-mentioned increases in sales.

### <FY2017 Forecast (vs. In August )>

The forecasts of orders received and sales remain unchanged. Operating profit is expected to increase due to an increase in sales and profitability improvement in the Vehicular turbocharger Business.

# 3. Financial Results by Segment Industrial System and General-Purpose Machinery



(In billion yen)

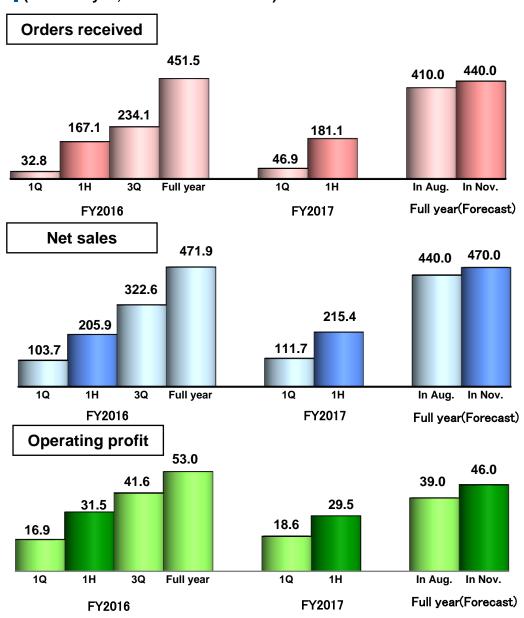
	Orders r	eceived				es			
	FY2016	FY2017		FY	2016			FY2017	
	Full year	Full year (Forecast)	1Q	1H	3Q	Full year	1Q	1H	Full year (Forecast)
Transport machinery	31.9	30.0	5.4	11.6	16.5	23.4	3.2	10.5	28.0
Parking	41.6	48.0	7.5	18.4	29.6	42.8	7.8	17.1	42.0
Thermal and surface treatment	35.2	44.0	7.8	15.6	23.2	32.3	13.2	23.0	43.0
Vehicular turbocharger	174.6	200.0	47.4	86.8	129.3	174.6	69.1	117.9	205.0
Rotating machinery	48.0	46.0	10.3	21.7	33.7	48.2	8.2	18.8	45.0

For details of "Vehicular turbocharger", please refer to <Appendices> on page 33.

# 3. Financial Results by Segment Aero Engine, Space and Defense



(In billion yen, accumulated amount)



### <Results by business segment>

#### [ Orders received]

Orders received increased from the previous corresponding period in the Aero engines Business and the Rocket systems/space utilization systems Business.

#### [ Net sales]

Net sales increased from the previous corresponding period for civil aero engines and the Rocket systems/space utilization systems Business.

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

(Units)

	2Q	Full Year
FY2016	641	1,282
FY2017	682	1,350

#### [ Operating profit ]

Operating profit declined mainly due to the effect of an increase in sales of the new PW1100G engine and an increase in selling, general and administrative expenses, despite an increase in spare parts for civil aero engines and the positive turn in foreign exchange.

### <FY2017 Forecast (vs. In August )>

Orders received are expected to increase for civil aero engines, and so on.

Net sales and operating profit are expected to increase by reflecting an increase in spare parts and the positive turn in foreign exchange rates relating to civil aero engines.

# 3. Financial Results by Segment Aero Engine, Space and Defense



(In billion yen)

	Orders	eceived				Net sale	es		
	FY2016	FY2017		FY	2016			FY2017	
	Full year	Full year (Forecast)	1Q	1H	3Q	Full year	1Q	1H	Full year (Forecast)
Civil aero engines	263.0	310.0	69.8	135.2	208.3	291.5	69.7	141.3	290.0

For details of "Civil aero engines", please refer to <Appendices> on page 32.

## <Appendices>

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



## **Progress in Large Overseas Projects**



### **Dominion Cove Point Liquefaction Project**





Aerial photo as of Sep. 2017

Liquid Ethane Unloading

Expected Completion Image



As of end of Sep 2017

Dec 2019: COD (#2)

### <Current status (Oct. 2017)>

- Engineering is essentially complete.
- Procurement of equipment is essentially complete.
- Overall project is 97% complete.
- · Gas Turbine 1st Fire was achieved.

### <Key milestones>

April 2013: Contract award

September 2014: FERC Order received & accepted March 2015: Groundbreaking Ceremony held

March 2017: DCS in Service

Apr - Nov 2017: Mechanical Completion

December 2017: Commencement of operations

### <Project Brief>

IHI E&C International Corporation and Kiewit Energy Company have entered into an engineering, procurement and construction contract to develop the Cove Point liquefied natural gas facility located on the Chesapeake Bay in Lusby, Maryland. The IHI/Kiewit joint venture will design, construct, commission and start up the estimated 5.25 million tons per annum liquefaction facility.

#### <Status>

As of end of Sept. 2017, foundation works are in progress. The erections of #1 pressure parts and ESP and #2 steel structure are in progress. #2 steel structure erection has been started from 19 July 2017. For boiler portion, 86% of engineering, 62% of procurement and 12% of erection activities were completed. As total 53% 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) 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

## Topics in the second quarter under review





### Order Received for Construction of Thermal Power Plant and Port in Bangladesh

The three-party consortium of IHI, Sumitomo Corporation, and Toshiba Corporation received an order to construct an ultra-super critical coal-fired thermal power plant and port for Coal Power Generation Company Bangladesh Limited.

This high efficiency ultra-super critical coal-fired thermal power plant equipment generates high pressure steam and temperatures that realize improved control of fuel consumption and CO2 emissions, and contributes to reducing environmental impact, which is Japan's state of the art technology.

This project consolidates Japanese technology and know-how, and will aid the Japanese government's Quality Infrastructure Partnership Initiative. Utilizing Japanese funding and technology, the project will meet the urgent need for electric power in Bangladesh and help drive the country's industrial and economic development.

### Order Received for Coal-Fired Boiler for Indonesia's State-Run Public Power Company



<Planned delivery site >

IHI received an order from ITOCHU Corporation to supply the boiler unit equipment for the Kalselteng-2 Coal-Fired Power Plant.

IHI has received orders for and delivered many coal-fired boilers both in Japan and overseas, and IHI believes that it was based on valuation for IHI's design technology, its advanced manufacturing technologies, and its strong operational track record for boilers which are compatible with a wide ranged kind of coal. This order follows the order for the boiler for the Lontar power station received last year.

To realize stable and efficient electricity supply in the global market and countries expecting economic growth over the coming years, such as Indonesia, IHI will continue to supply power generation equipment and systems, primarily consisting of boilers boasting high efficiency and quality as well as superior environmental performance.

## Topics in the second quarter under review



## D

### Delivery of Floating Production, Storage and Offloading Unit (FPSO) Hull to Norway

IHI completed construction of a floating production, storage, and offloading unit (FPSO) hull for BW Offshore Limited, and delivered the unit on August 30.

FPSO is a floating vessel used for production, storage and offloading of crude oil from subsea oil and gas field. In this project, IHI undertook the construction of the FPSO hull. Following delivery, this FPSO will be chartered by Premier Oil plc, an independent oil and gas exploration and production company in UK, and the start of its operation is assumed to be in the North Sea, known for its difficult maritime conditions, within 2017.



<FPSO>

## New Company Established Through Reorganization of Agricultural Machinery and Small Power Systems Business



<Ride-on reel lawn mower>

On October 1, new company IHI Agri-Tech Corporation was established through the integration of IHI's group companies IHI Shibaura Machinery Corporation (ISM) and IHI STAR Machinery Corporation (STAR).

Merging ISM, which handles grass and lawn maintenance equipment, and STAR, which handles agricultural machinery, and merging technologies along with consolidating resources, will bolster the earnings capability of the business. In addition, utilizing ISM's propelling technologies and STAR's agricultural work machine technologies, the company will continue to provide even higher-value-added products, such as new developments in tractor-mounted work machines and self-propelled work equipment that meet the market needs.

## Topics in the second quarter under review



### **Establishment of Newly Integrated Rotating Machinery Company**

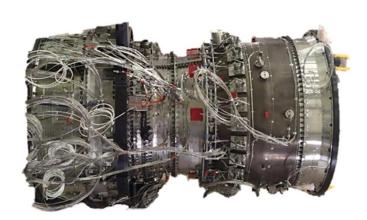
IHI transferred the Rotating machinery Business to group company IHI Compressor and Machinery Co., Ltd. (ICM) via a company split, and established newly integrated company IHI Rotating Machinery Engineering Co., Ltd. on October 1.

By integrating and consolidating management resources related to rotating machinery into IHI Rotating Machinery Engineering, the company will build a full operational framework covering product development, sales, and after-sales services. In addition, the company will conduct efficient operations, effectively allocate personnel, and develop business globally and quickly in line with customers' needs.



< IHI General-purpose turbo compressor >

## **Delivery of Key Jet Engine Component (Core Engine) Targeting Future Fighter Jets**



IHI delivered a key component of a 15-ton thrust jet engine targeted for use on future fighter jets to the Acquisition, Technology & Logistics Agency. The part delivered was called a core engine, a unit comprising a compressor, combustor, and high-pressure turbine, and is capable of autonomous operation. It is an important component that affects a jet engine's performance. Going forward, IHI will continue to support the Acquisition, Technology & Logistics Agency with a robust framework, and through this business IHI will develop and integrate globally-leading technologies and build a technological foundation for the development of fighter jet engines.

<Core engine>



## (1) Net sales of civil aero engines

(In billion yen)

					Actual							Forecast
	'11	'12	'13	'14	'15		FY2	016				
	11	12	13	14	15	1Q	1H	3Q	Full Year	1Q	1H	Full Year
Net sales	143.6	169.8	226.0	267.0	299.1	69.8	135.2	208.3	291.5	69.7	141.3	290.0

## (2) Number of civil aero engines delivered

(Units)

					Ac	tual(acc	umulated	(k					
	′06	′07	′08	′09	′10	′11	′12	′13	′14	′15	′16	′17/2Q	Main loading
V2500	3,154	3,474	3,828	4,168	4,551	4,980	5,468	5,969	6,469	6,896	7,236	7,388	Airbus A319/320/321
GE90	579	742	896	1,071	1,223	1,399	1,589	1,806	2,039	2,257	2,457	2,553	Boeing B777
CF34	1,374	1,802	2,274	2,604	2,919	3,242	3,548	3,820	4,156	4,471	4,821	4,971	For regional jet (70 to 110 seats)
GEnx						118	259	468	751	1,035	1,295	1,432	Boeing B787/B747-8
PW1100G										16	148	288	Airbus A320Neo
Passport20												7	Bombardier Global7000/8000
Total	5,107	6,018	6,998	7,843	8,693	9,739	10,864	12,063	13,415	14,675	15,957	16,639	

(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.

## Vehicular turbocharger



## <Net sales by region>

											<b>\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\</b>	
					į	Actual						Forecast
	′11	′12	′13	′14	′15		FY2	016	_		FY2017	
	11	12	13	14	13	1Q	1H	3Q	Full Year	1Q	1H	Full Year
Japan	33.1	33.9	35.3	37.5	34.6	8.5	18.0	27.4	38.9	10.1	19.6	37.0
Asia	16.9	24.8	29.8	27.5	21.6	6.6	9.6	12.7	15.8	2.8	5.7	11.0
China	14.3	18.1	23.4	24.3	24.9	11.8	20.5	34.3	48.5	21.5	38.3	63.0
North America	1.1	1.3	1.6	1.8	2.4	1.3	1.9	2.5	3.3	0.7	1.9	7.0
Central and South America	0.0	0.0	0.0	0.7	3.4	2.9	4.3	5.0	6.1	1.1	2.8	8.0
Europe	43.7	43.2	60.2	75.6	74.3	16.0	32.2	47.1	61.7	32.7	49.2	79.0
Others	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	109.4	121.6	150.7	167.7	161.6	47.4	86.8	129.3	174.6	69.1	117.9	205.0



## (1) Lease revenue in Toyosu

(In billion yen)

	Actual									Forecast		
	'11 '12 '13 '14 '15 <b>FY2016</b>											
	11	12	13	14	13	1Q	1H	3Q	Full Year	1Q	1H	Full Year
Lease revenue	9.5	9.2	9.1	9.3	10.1	2.3	4.6	7.0	9.3	2.3	4.6	9.2

## (2) Lease revenue and expense in Toyosu (FY2017.2Q)

	Lease	Lease e	Lease		
	revenue	Depreciation	Others	income	
FY2017.2Q	4.6	1.9	1.3	1.3	

### Development Plan for Toyosu 1 to 3 chome Area

Civic Center: Opened in September

Fire department office: Completed in

Approx. 5ha

June 2016

Property

of IHI

#### **Toyosu IHI Building**

25 floors above ground, Approx. 125m high Gross floor area: 97,617m<sup>2</sup> Completed in February 2006

#### Kindergarten, Nursery school, Café, Marriage ceremonial hall.

Site area: 19,492m<sup>2</sup>

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 m2

Opened in October 2006

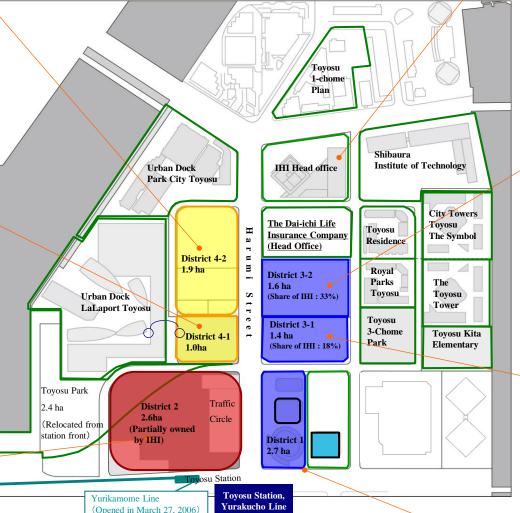


#### Complex building A · C, (IHI and Mitsui Fudosan)

36 floors above ground, Approx. 178m high Gross floor area: 185,000m2

Scheduled for completion in April 2020





Office Leasing

Land Leasing

Office Leasing (Leased land)

Sold, Donated, Exchanged

Category 1 Urban Redevelopment Project %1

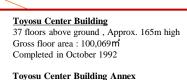
#### Toyosu Foresia (IHI & Mitsubishi Estate Company, Ltd.)

16 floors above ground, Approx. 75m high, Gross floor area: 101,503m2 Completed in July 2014



#### Tovosu 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 m<sup>2</sup> Completed in August 2010



33 floors above ground, Approx. 150m high

Gross floor area: 105.448m2 Completed in August 2006



¾1 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.