

# Financial Results for Second Quarter FY2021 (IFRS) (for the year ending March 31, 2022)

**IHI**

November 9, 2021

**IHI Corporation**

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# 1. Consolidated Results for Second Quarter FY2021



- The performances of the three segments, Resources, Energy and Environment, Social Infrastructure and Offshore Facilities and Industrial Systems and General-Purpose Machinery, remained steady following the first quarter of FY2021. However, the impact of the shortage of semiconductors, the supply chain disruptions, and soaring steel prices and marine transportation costs have become apparent.
- In Aero Engine, Space and Defense, sales of engines and spare parts for Civil aero engines increased gradually, and recovery from the impact of the spread of COVID-19 continued.
- Free cash flows turned profitable in the first half of FY2021 due to the improvement of working capital, in addition to the sale of assets held in the first quarter in FY2021.

# 1. Consolidated Results for Second Quarter FY2021

## Summary of Financial Results

(In billion yen)

	<b>FY2020.2Q YTD</b>	<b>FY2021.2Q YTD</b>	<b>Change</b>
<b>Orders received</b>	<b>426.0</b>	<b>508.3</b>	<b>82.3</b>
<b>Revenue</b>	<b>481.7</b>	<b>516.5</b>	<b>34.8</b>
<b>Operating profit</b>	<b>(6.1)</b>	<b>26.3</b>	<b>32.4</b>
<b>Profit before tax</b>	<b>(8.8)</b>	<b>26.6</b>	<b>35.4</b>
<b>Profit attributable to owners of parent</b>	<b>(9.7)</b>	<b>15.1</b>	<b>24.9</b>

FY2020.2Q YTD: Amount converted from Japanese GAAP to IFRS. The same applies hereinafter.

**Note: Average FX rate FY2020.2Q YTD US\$ 1.00 = ¥107.51**

**FY2021.2Q YTD US\$ 1.00 = ¥110.34**

# 1. Consolidated Results for Second Quarter FY2021

## Financial Results by Segment

### ■ Orders received & Order backlog

(In billion yen)

	Orders received			Order backlog		
	FY2020.2Q YTD	FY2021.2Q YTD	Change	FY2020	FY2021.2Q	Change
Resources, Energy and Environment	100.5	147.1	46.5	482.3	467.9	(14.3)
Social Infrastructure and Offshore Facilities	65.6	87.7	22.1	226.4	248.1	21.7
Industrial Systems and General-Purpose Machinery	159.3	179.5	20.1	175.3	179.7	4.4
Aero Engine, Space and Defense	90.6	86.8	(3.8)	248.5	223.4	(25.1)
<b>Total Reportable Segment</b>	<b>416.2</b>	<b>501.2</b>	<b>84.9</b>	<b>1,132.6</b>	<b>1,119.2</b>	<b>(13.3)</b>
Others	33.2	24.8	(8.3)	32.3	30.7	(1.6)
Adjustment	(23.4)	(17.6)	5.7	-	-	-
<b>Total</b>	<b>426.0</b>	<b>508.3</b>	<b>82.3</b>	<b>1,165.0</b>	<b>1,150.0</b>	<b>(15.0)</b>
<b>Overseas orders received / order backlog</b>	<b>166.5</b>	<b>227.8</b>	<b>61.2</b>	<b>313.2</b>	<b>308.0</b>	<b>(5.1)</b>
<b>% of Overseas orders received / order backlog</b>	<b>39%</b>	<b>45%</b>	<b>6%</b>	<b>27%</b>	<b>27%</b>	<b>0%</b>

# 1. Consolidated Results for Second Quarter FY2021

## Financial Results by Segment

### ■ Revenue & Operating profit

(In billion yen)  
(Reference: Estimated amount)

	Revenue			Operating profit		
	FY2020.2Q YTD	FY2021.2Q YTD	Change	FY2020.2Q YTD	FY2021.2Q YTD	Change
Resources, Energy and Environment	142.4	159.7	17.2	4.1	8.0	3.9
Social Infrastructure and Offshore Facilities	65.4	69.9	4.4	5.6	4.0	(1.5)
Industrial Systems and General-Purpose Machinery	172.4	175.9	3.5	0.1	5.5	5.4
Aero Engine, Space and Defense	99.2	108.2	9.0	(16.8)	(12.3)	4.5
<b>Total Reportable Segment</b>	<b>479.6</b>	<b>513.8</b>	<b>34.2</b>	<b>(6.9)</b>	<b>5.2</b>	<b>12.2</b>
Others	22.0	24.5	2.5	0.8	1.4	0.6
Adjustment	(19.9)	(21.9)	(1.9)	0.0	19.6	19.5
<b>Total</b>	<b>481.7</b>	<b>516.5</b>	<b>34.8</b>	<b>(6.1)</b>	<b>26.3</b>	<b>32.4</b>

Revenue	Operating profit
FY2019.2Q YTD	
138.9	(6.1)
66.2	4.9
184.9	2.4
155.9	8.0
<b>546.1</b>	<b>9.2</b>

Overseas revenue	186.6	227.5	40.9
% of overseas revenue	39%	44%	5%

FY2019.2Q YTD: IFRS based amount estimated based on Japanese GAAP financial data

# 1. Consolidated Results for Second Quarter FY2021

## Financial Results by Segment

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

(In billion yen)

	Change in revenue	Change in construction profitability	Change in foreign exchange rate	Change in SG&A	Change in other income and expenses	Total
Resources, Energy and Environment	0.3	3.3	0.2		0.1	3.9
Social Infrastructure and Offshore Facilities	0.5	(0.4)		(0.6)	(1.0)	(1.5)
Industrial Systems and General-Purpose Machinery	2.7	2.0		(1.7)	2.4	5.4
Aero Engine, Space and Defense	(0.4)	2.8	1.4	0.2	0.5	4.5
<b>Total Reportable Segment</b>	<b>3.1</b>	<b>7.7</b>	<b>1.7</b>	<b>(2.1)</b>	<b>1.9</b>	<b>12.2</b>
Others	1.3			(0.5)	(0.2)	0.6
Adjustment	0.1			(2.5)	21.9	19.5
<b>Total</b>	<b>4.6</b>	<b>7.7</b>	<b>1.7</b>	<b>(5.2)</b>	<b>23.6</b>	<b>32.4</b>

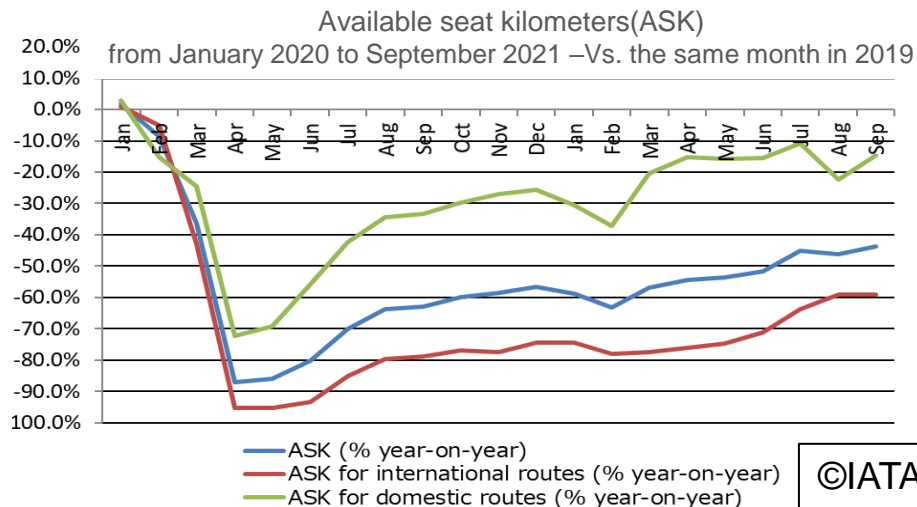
There are cases that the aggregated amount of each segment or factor doesn't match to the total due to rounding off.



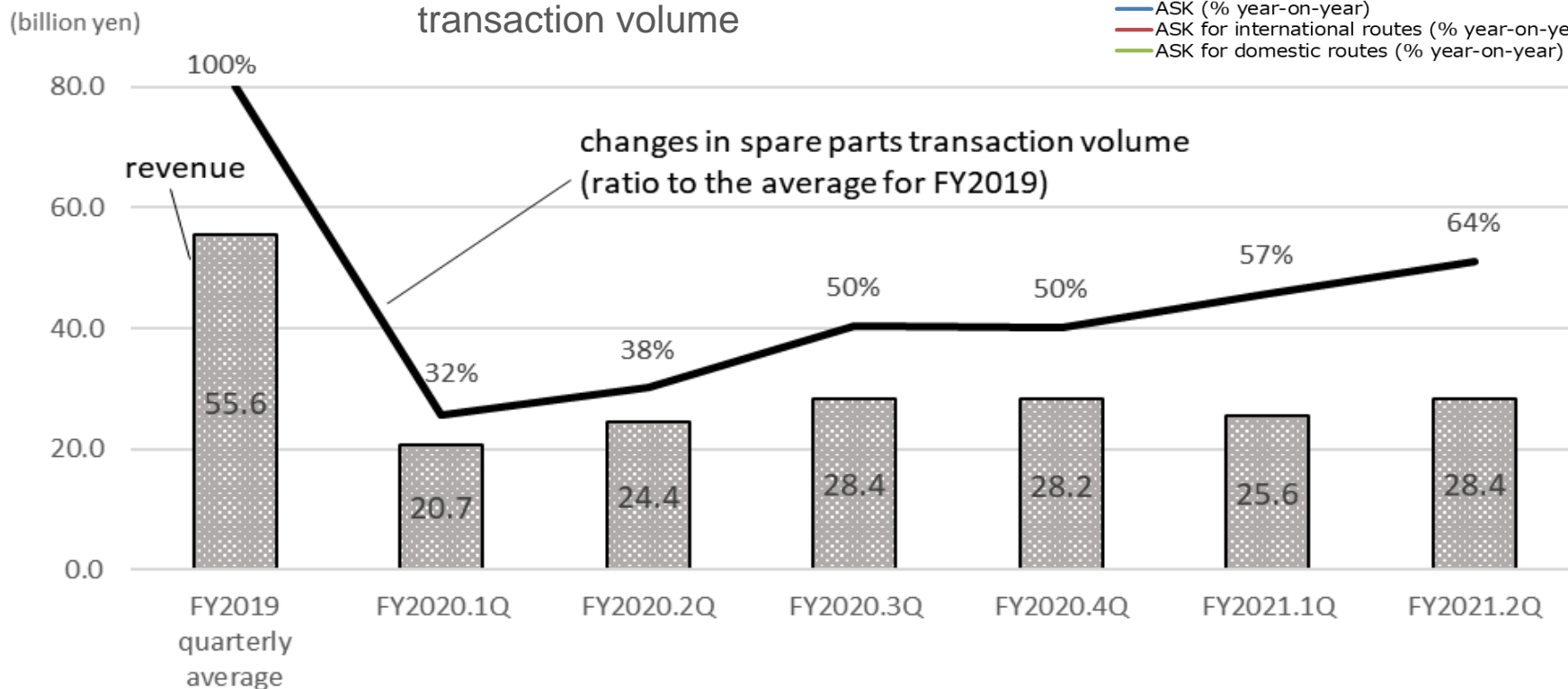
# 1. Consolidated Results for Second Quarter FY2021

## Financial Results by Segment (Civil aero engines)

Demand for aero transportation continues to recover gradually, and the transaction volume of spare parts is recovering also gradually but steadily.



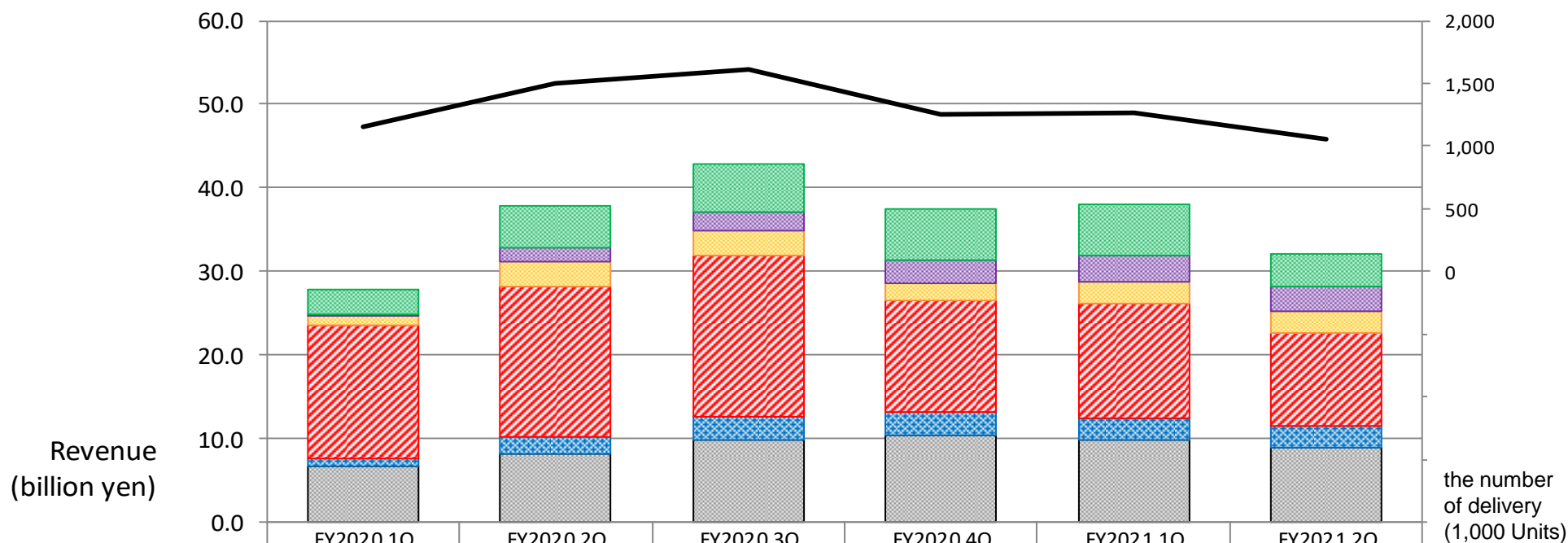
Civil aero engines  
changes in revenue and spare parts  
transaction volume



# 1. Consolidated Results for Second Quarter FY2021

## Vehicular turbochargers

Vehicular turbochargers : The number of delivery and revenue by region



	FY2020.1Q	FY2020.2Q	FY2020.3Q	FY2020.4Q	FY2021.1Q	FY2021.2Q
Europe	3.0	5.0	5.8	6.1	6.1	4.0
Central and South America	0.2	1.7	2.2	2.8	3.1	3.0
North America	1.1	2.9	2.9	2.1	2.6	2.6
China	15.9	18.0	19.4	13.2	13.8	11.1
Asia	0.9	2.0	2.7	2.9	2.5	2.6
Japan	6.8	8.3	9.9	10.4	9.9	8.9
Total	28.2	37.8	42.9	37.7	38.3	31.9
Number of delivery	1,150	1,500	1,610	1,250	1,260	1,050

Revenue in China, Europe and Japan decreased from FY2021.1Q due to the impact of reduced automobile production caused by the shortage of semiconductors and the supply chain disruptions.

# 1. Consolidated Results for Second Quarter FY2021

## Finance Income / Costs etc.

(In billion yen)

	FY2020.2Q YTD	FY2021.2Q YTD	Change
Foreign exchange gains (losses)	(1.7)	0.7	2.5
Share of profit (loss) of investments accounted for using equity method	0.7	0.8	0.1
Other finance income (costs)	(1.6)	(1.3)	0.2
<b>Finance income / costs etc.</b>	<b>(2.7)</b>	<b>0.2</b>	<b>2.9</b>

Change of FX rate(US\$) FY2020.1H ¥(3.05) (beginning ¥108.83→end ¥105.78)  
 FY2021.1H ¥1.27 (beginning ¥110.65→end ¥111.92)

# 1. Consolidated Results for Second Quarter FY2021

## Financial Position



(In billion yen)

	As of March 31, 2021	As of September 30, 2021	Change
<b>Total assets</b>	<b>1,832.8</b>	<b>1,774.3</b>	<b>(58.5)</b>
[Cash and cash equivalents]	[120.7]	[79.8]	[(40.9)]
[Trade receivables & contract assets]	[456.3]	[408.3]	[(47.9)]
[Inventories]	[326.4]	[358.3]	[31.8]
<b>Total liabilities</b>	<b>1,505.1</b>	<b>1,432.8</b>	<b>(72.3)</b>
[Trade payables etc.]	[234.4]	[203.6]	[(30.7)]
[Contract liabilities]	[165.8]	[171.4]	[5.6]
[Interest-bearing liabilities]	[605.9]	[570.4]	[(35.4)]
Bonds and borrowings	[463.1]	[432.8]	[(30.2)]
Lease liabilities *1	[142.8]	[137.6]	[(5.2)]
<b>Total equity</b>	<b>327.7</b>	<b>341.5</b>	<b>13.7</b>
Equity attributable to owners of parent	300.7	318.2	17.4
Non-controlling interests	26.9	23.2	(3.6)
<b>Total liabilities and equity</b>	<b>1,832.8</b>	<b>1,774.3</b>	<b>(58.5)</b>
<b>D/E ratio (times) *2</b>	<b>1.85</b>	<b>1.67</b>	<b>(0.18)</b>
<b>Ratio of equity attributable to owners of parent (%) *3</b>	<b>16.4</b>	<b>17.9</b>	<b>1.5</b>

\*1 Including liabilities corresponding to operating leases under Japanese GAAP  
(¥111.9 billion and ¥111.8 billion as of March 31, 2021 and September 30, 2021)

\*2 D/E ratio = Interest-bearing liabilities / Total equity

\*3 Ratio of equity attributable to owners of parent = Equity attributable to owners of parent / Total liabilities and equity

# 1. Consolidated Results for Second Quarter FY2021

## Cash Flows

(In billion yen)

	FY2020.2Q YTD	FY2021.2Q YTD	Change
<b>Profit before tax</b>	(8.8)	26.6	35.4
<b>Depreciation *1</b>	34.9	33.4	(1.5)
<b>Change in working capital *2</b>	(48.7)	(12.8)	35.9
<b>Other</b>	(25.4)	*3 (46.9)	(21.4)
<b>Cash flows from operating activities</b>	(48.1)	0.1	48.2
<b>Cash flows from investing activities</b>	(29.2)	2.7	31.9
<b>Free cash flows</b>	(77.3)	2.9	80.2
<b>Cash flows from financing activities</b>	15.5	(43.8)	(59.3)

\*1: Depreciation consists of depreciation of property, plant and equipment, investment property, right-of-use assets and software, does not include amortization of capitalized development costs, patents and other intangible assets.

\*2: Change in working capital consists of change in trade receivables, contract assets, inventories, prepayments, contract liabilities, trade payables and refund liabilities.

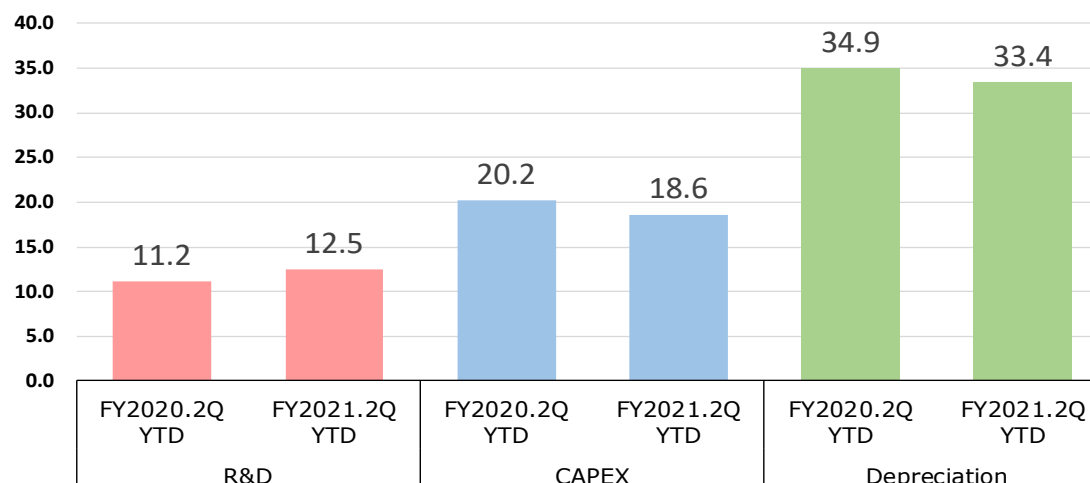
Working capital = Trade receivables + Contract assets + Inventories + Prepayments - Contract liabilities  
- Trade payables - Refund liabilities

\*3: Other includes transfer of gain on sale of assets held to cash flows from investing activities.

# 1. Consolidated Results for Second Quarter FY2021 Supplementary Information

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

(In billion yen)



CAPEX and depreciation consist of those of property, plant and equipment, investment property, right-of-use assets and software.

## (2) Revenue by Region

(In billion yen)

	FY2020.2Q YTD	FY2021.2Q YTD
Japan	295.1	288.9
Asia	52.3	74.0
China	48.9	42.0
North America	57.7	69.2
Central and South America	2.8	6.4
Europe	21.0	31.6
Others	3.6	4.1
<b>Total</b>	<b>481.7</b>	<b>516.5</b>

## 2. Forecasts of the Consolidated Results for FY2021

## 2. Forecasts of the Consolidated Results for FY2021

### Summary of Forecasts

- Although the business results up to the first half has been steady, the full-year forecasts, including cash flows, remain unchanged due to increasing uncertainty in the business environment.

**Assumed FX rate US\$ 1.00 = ¥105**

**(in the second half of FY2021)**

**(In billion yen)**

	<b>FY2020 Results</b>	<b>FY2021 Forecast (in Aug.)</b>	<b>FY2021 Forecast (in Nov.)</b>	<b>Change Vs. Forecast (in Aug.)</b>
<b>Orders received</b>	<b>1,097.0</b>	<b>1,160.0</b>	<b>1,160.0</b>	<b>0.0</b>
<b>Revenue</b>	<b>1,112.9</b>	<b>1,180.0</b>	<b>1,180.0</b>	<b>0.0</b>
<b>Operating profit</b>	<b>27.9</b>	<b>70.0</b>	<b>70.0</b>	<b>0.0</b>
<b>Profit before tax</b>	<b>27.6</b>	<b>60.0</b>	<b>60.0</b>	<b>0.0</b>
<b>Profit attributable to owners of parent</b>	<b>13.0</b>	<b>35.0</b>	<b>35.0</b>	<b>0.0</b>

(Reference)

FX rate sensitivity (impact amount on operating profit by change of 1 yen) : US\$ ¥0.5 billion



## 2. Forecasts of the Consolidated Results for FY2021

### Forecasts by Segments

IHI

■ Orders received

(In billion yen)

	FY2020 Results	FY2021 Forecast (in Aug.)	FY2021 Forecast (in Nov.)	Change Vs. Forecast (in Aug.)
Resources, Energy and Environment	274.7	310.0	310.0	0.0
Social Infrastructure and Offshore Facilities	166.1	160.0	160.0	0.0
Industrial Systems and General-Purpose Machinery	365.2	400.0	400.0	0.0
Aero Engine, Space and Defense	268.9	270.0	280.0	10.0
<b>Total Reportable Segment</b>	<b>1,075.0</b>	<b>1,140.0</b>	<b>1,150.0</b>	<b>10.0</b>
Others	70.7	70.0	60.0	(10.0)
Adjustment	(48.7)	(50.0)	(50.0)	0.0
<b>Total</b>	<b>1,097.0</b>	<b>1,160.0</b>	<b>1,160.0</b>	<b>0.0</b>

## 2. Forecasts of the Consolidated Results for FY2021

### Forecasts by Segments

#### ■ Revenue & Operating profit

- The forecasts of revenue and operating profit are expected to decrease due to the delays in construction progress and the soaring steel prices and marine transportation costs in Social Infrastructure and Offshore Facilities, and the forecast of operating profit is expected to decrease due to the impact of the shortage of semiconductors and the supply chain disruptions in Industrial Systems and General-Purpose Machinery.
- The forecasts of revenue and operating profit in Aero Engine, Space and Defense are expected to increase due to the depreciation of the yen against assumed exchange rate. (In billion yen)

	Revenue				Operating profit			
	FY2020 Results	FY2021 Forecast (in Aug.)	FY2021 Forecast (in Nov.)	Change Vs. Forecast (in Aug.)	FY2020 Results	FY2021 Forecast (in Aug.)	FY2021 Forecast (in Nov.)	Change Vs. Forecast (in Aug.)
Resources, Energy and Environment	317.6	340.0	340.0	0.0	19.1	23.0	23.0	0.0
Social Infrastructure and Offshore Facilities	157.9	180.0	170.0	(10.0)	17.1	17.0	16.0	(1.0)
Industrial Systems and General-Purpose Machinery	374.2	400.0	400.0	0.0	11.4	29.0	28.0	(1.0)
Aero Engine, Space and Defense	251.5	260.0	270.0	10.0	(40.1)	(27.0)	(25.0)	2.0
<b>Total Reportable Segment</b>	<b>1,101.4</b>	<b>1,180.0</b>	<b>1,180.0</b>	<b>0.0</b>	<b>7.5</b>	<b>42.0</b>	<b>42.0</b>	<b>0.0</b>
Others	60.5	60.0	60.0	0.0	2.3	3.0	3.0	0.0
Adjustment	(49.0)	(60.0)	(60.0)	0.0	18.0	25.0	25.0	0.0
<b>Total</b>	<b>1,112.9</b>	<b>1,180.0</b>	<b>1,180.0</b>	<b>0.0</b>	<b>27.9</b>	<b>70.0</b>	<b>70.0</b>	<b>0.0</b>

## 2. Forecasts of the Consolidated Results for FY2021

### Forecasts by Segments

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

(In billion yen)

	Change in revenue	Change in construction profitability	Change in foreign exchange rate	Change in SG&A	Change in other income and expenses	Total
Resources, Energy and Environment						0.0
Social Infrastructure and Offshore Facilities	(1.0)					(1.0)
Industrial Systems and General-Purpose Machinery	(1.0)					(1.0)
Aero Engine, Space and Defense			2.0			2.0
<b>Total Reportable Segment</b>	<b>(2.0)</b>	<b>0.0</b>	<b>2.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>
Others						0.0
Adjustment						0.0
<b>Total</b>	<b>(2.0)</b>	<b>0.0</b>	<b>2.0</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>

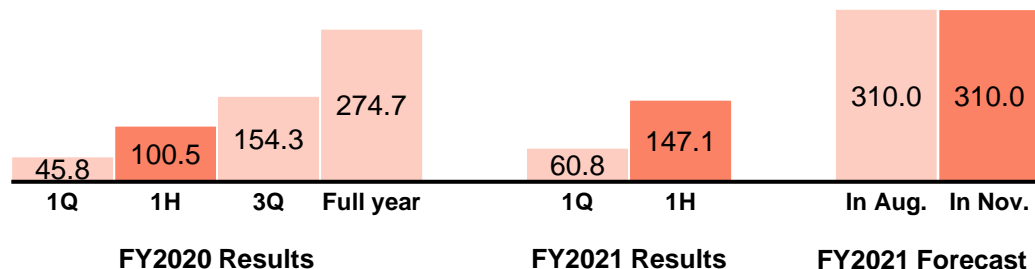
# 3. Financial Results by Segment



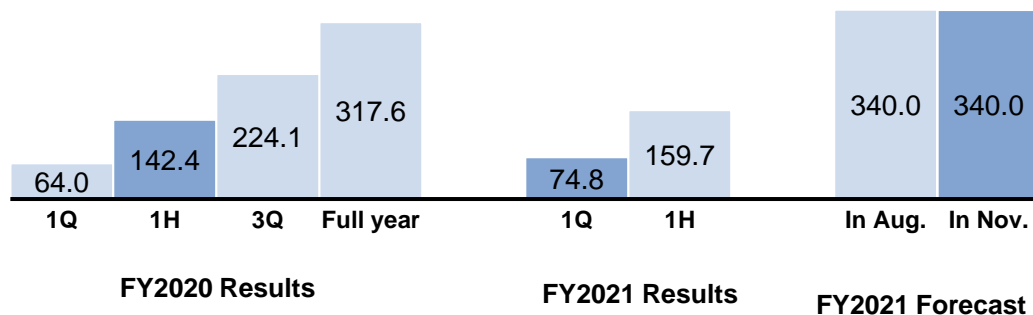
# 3. Financial Results by Segment Resources, Energy and Environment

(In billion yen, accumulated amount)

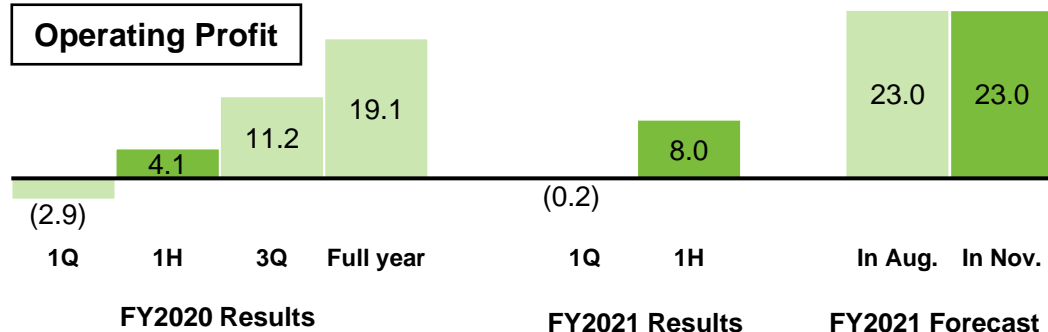
## Orders received



## Revenue



## Operating Profit



## Main Businesses : Power systems, Carbon solutions and Nuclear energy

### Results (vs FY2020.2Q)

#### 【Orders received】

Increased in Carbon solutions, Nuclear energy and Power systems.

#### 【Revenue】

Increased in Nuclear energy.

#### 【Operating profit】

Increased due to the effect that mostly unprofitable projects in Carbon solutions have mostly hit the bottom, in addition to the increased revenue in Nuclear energy.

### Full year forecasts (vs In August)

- The forecasts of orders received, revenue and operating profit remain unchanged.

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

(In billion yen)

	Orders received						Revenue						
	FY2020			FY2021			FY2020				FY2021		
	1Q	1H	Full year	1Q	1H	Full year (Forecast)	1Q	1H	3Q	Full year	1Q	1H	Full year (Forecast)
Power systems	19.0	35.2	71.9	25.5	41.4	83.0	18.8	38.3	61.1	87.1	18.6	38.4	93.0
Carbon solutions *	13.5	27.3	119.9	15.4	62.2	146.0	33.0	78.7	119.2	159.4	35.2	76.4	151.0
Nuclear energy	9.1	15.3	42.6	10.4	26.9	49.0	4.5	10.0	18.1	32.7	6.0	16.3	45.0

\*In accordance with the SBU reorganization in FY2021, results in FY2020 are rearranged.

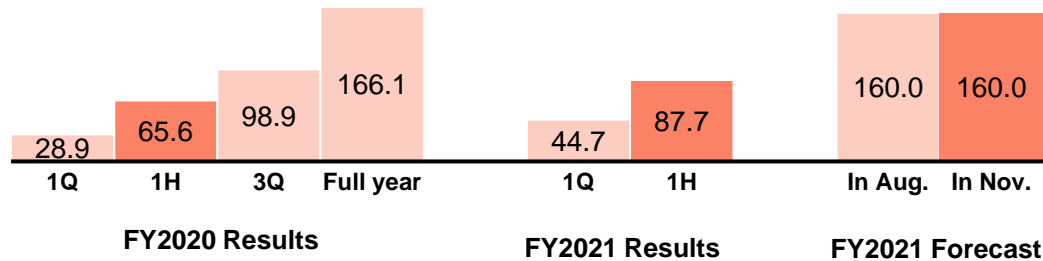
# 3. Financial Results by Segment

## Social Infrastructure and Offshore Facilities

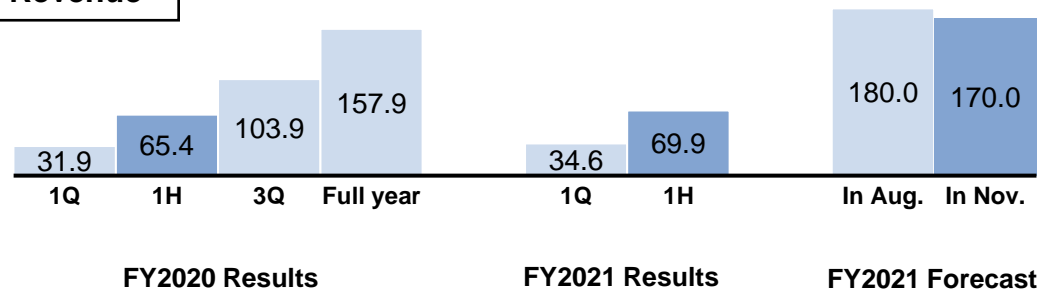
(In billion yen, accumulated amount)

**Main Businesses : Bridges and water gates, Shield systems, Urban development, Transport systems, and Concrete construction materials**

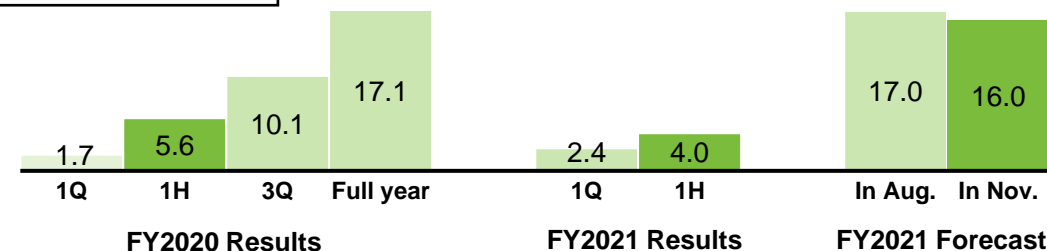
### Orders received



### Revenue



### Operating Profit



### Results (vs FY2020.2Q)

#### 【Orders received】

Increased in Bridges and water gates.

#### 【Revenue】

Although decreased due to a decline in real estate sales in Urban development, increased in Shield systems and Concrete construction materials.

#### 【Operating profit】

Despite an increase in revenue, operating profit decreased due to the soaring steel prices and marine transportation costs in Bridges and water gates, in addition to the effect of gain on sales of investment property recorded in the corresponding period of the previous fiscal year.

### Full year forecasts (vs In August)

- In addition to the delays in construction progress in Bridges and water gates, the forecasts of revenue and operating profit are expected to decrease due to the soaring steel prices and marine transportation costs.

### 3. Financial Results by Segment

## Social Infrastructure and Offshore Facilities

(In billion yen)

	Orders received						Revenue						
	FY2020			FY2021			FY2020				FY2021		
	1Q	1H	Full year	1Q	1H	Full year (Forecast)	1Q	1H	3Q	Full year	1Q	1H	Full year (Forecast)
Bridges and water gates	11.1	29.9	79.3	31.2	61.4	95.0	15.1	31.2	49.4	76.8	17.8	33.6	92.0
Shield systems	4.7	7.3	21.7	1.2	4.4	19.0	3.5	9.1	12.3	19.4	5.8	12.0	22.0
Urban development	6.5	12.7	23.9	4.6	9.4	18.0	6.6	11.4	18.9	23.9	4.6	9.6	18.0

\*For related information of “Urban development” in Toyosu, please refer to <Appendices> on pages 35 and 36.



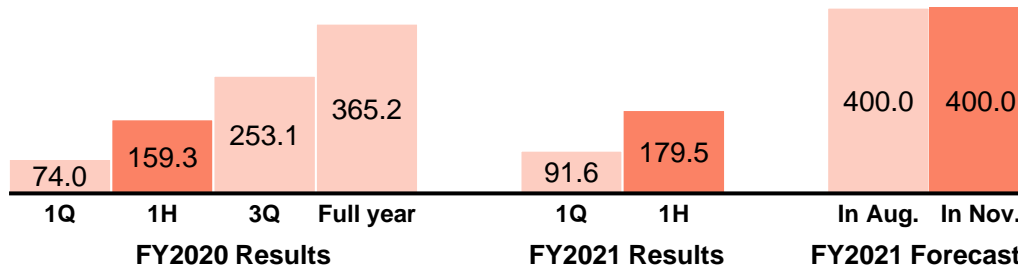
### 3. Financial Results by Segment

## Industrial Systems and General-Purpose Machinery

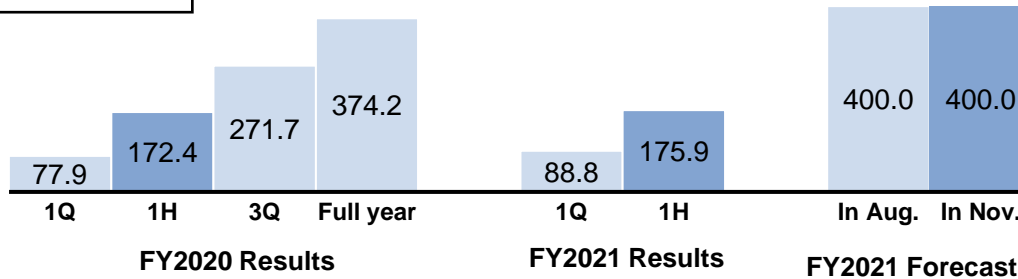
(In billion yen, accumulated amount)

**Main Businesses : Vehicular turbochargers, Parking, Rotating machineries, Heat treatment and surface engineering, Transport machineries and Logistics and industrial systems**

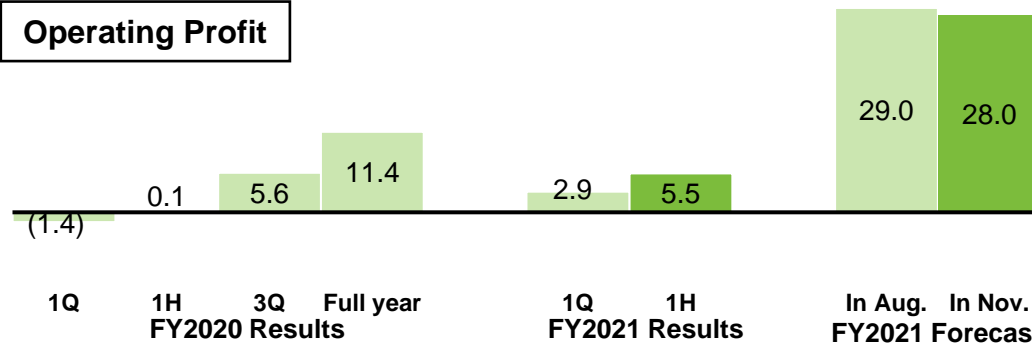
#### Orders received



#### Revenue



#### Operating Profit



#### Results (vs FY2020.2Q)

##### 【Orders received】

Increased in Heat treatment and surface engineering and Vehicular turbochargers.

##### 【Revenue】

Despite a decrease in Transport machineries, increased in Heat treatment and surface engineering and Vehicular turbochargers.

##### 【Operating profit】

In addition to the effect of the restructuring cost recorded in the corresponding period of the previous fiscal year, operating profit increased due to increased revenue and strengthening the cost structure in Heat treatment and surface engineering and Vehicular turbochargers.

#### Full year forecasts (vs In August)

- Although there is the effect of the depreciation of the yen centered on the Chinese yuan in Vehicular turbochargers, the forecast of operating profit is expected to decrease due to the impact of reduced automobile production caused by the shortage of semiconductors and the supply chain disruptions.

### 3. Financial Results by Segment

## Industrial Systems and General-Purpose Machinery

(In billion yen)

	Orders received						Revenue						
	FY2020			FY2021			FY2020				FY2021		
	1Q	1H	Full year	1Q	1H	Full year (Forecast)	1Q	1H	3Q	Full year	1Q	1H	Full year (Forecast)
Vehicular turbochargers	28.3	66.2	146.9	38.6	71.4	157.0	28.2	66.0	108.9	146.6	38.3	70.2	157.0
Parking	10.2	21.8	50.2	10.6	22.9	51.0	9.3	20.5	33.5	46.0	9.1	19.6	54.0
Rotating machineries	12.0	23.2	46.6	13.6	26.7	53.0	10.3	23.0	36.0	49.7	11.9	23.7	53.0
Heat treatment and surface engineering	5.6	11.8	29.8	10.7	20.9	40.0	6.7	13.7	21.4	30.4	8.7	18.6	39.0
Transport machineries	4.9	8.3	29.6	4.1	9.7	30.0	10.2	19.7	29.1	40.0	7.3	16.4	39.0

\*For details of “Vehicular turbochargers”, please refer to <Appendices> on page 34.

#### <Number of vehicular turbochargers delivered>

(1,000 Units)

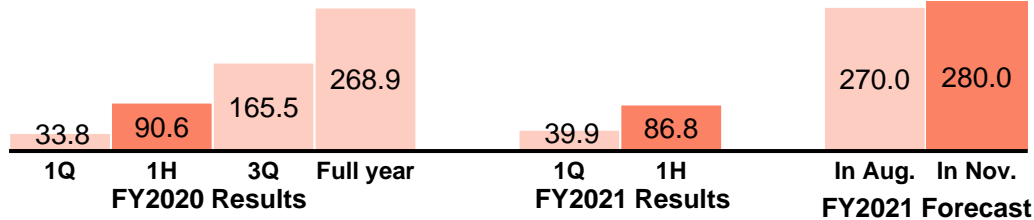
	1H	Full Year
FY2020	2,650	5,510
FY2021	2,310	5,200

# 3. Financial Results by Segment

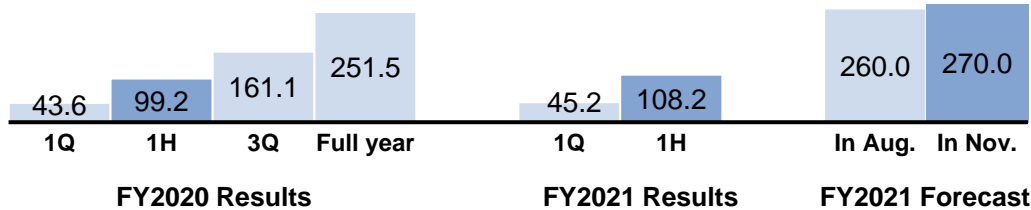
## Aero Engine, Space and Defense

(In billion yen, accumulated amount)

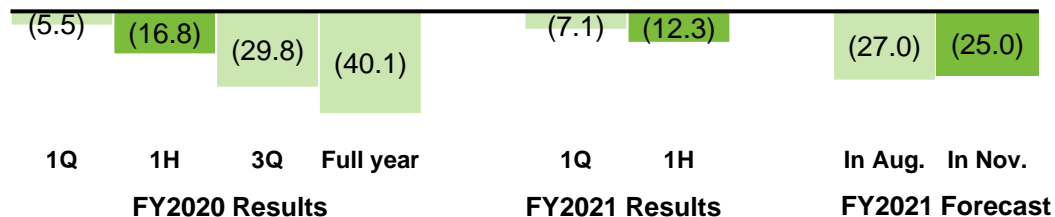
### Orders received



### Revenue



### Operating Profit



### Main Businesses : Aero engines, Rocket systems and space utilization systems and Defense systems

#### Results (vs FY2020.2Q)

##### 【Orders received】

Decreased in Defense systems.

##### 【Revenue】

In addition to increased sales of engines and spare parts in Civil aero engines, revenue increased in Rocket systems and space utilization systems.

##### 【Operating profit】

There are factors that reduce profits due to an increase in sales of newly made engines with heavy burden in early stage in Civil aero engines. On the other hand, the loss narrowed due to the depreciation of the yen compared to the corresponding period of the previous fiscal year, in addition to increased sales of spare parts and the improvement in profitability by strengthening the cost structure.

#### Full year forecasts (vs In August)

- Sales of engines and spare parts for Civil aero engines are expected to recover gradually from the third quarter onward, but only the increase in revenue and operating profit affected by the depreciation of the yen against assumed exchange rate was reflected, because the trend of demand for aero transportation is unclear.

### 3. Financial Results by Segment

## Aero Engine, Space and Defense

(In billion yen)

	Orders received						Revenue						
	FY2020			FY2021			FY2020				FY2021		
	1Q	1H	Full year	1Q	1H	Full year (Forecast)	1Q	1H	3Q	Full year	1Q	1H	Full year (Forecast)
Civil aero engines	21.5	44.3	100.8	25.7	53.5	130.0	20.7	45.1	73.5	101.7	25.6	54.0	130.0

\*For details of “Civil aero engines”, please refer to <Appendices> on page 33.

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

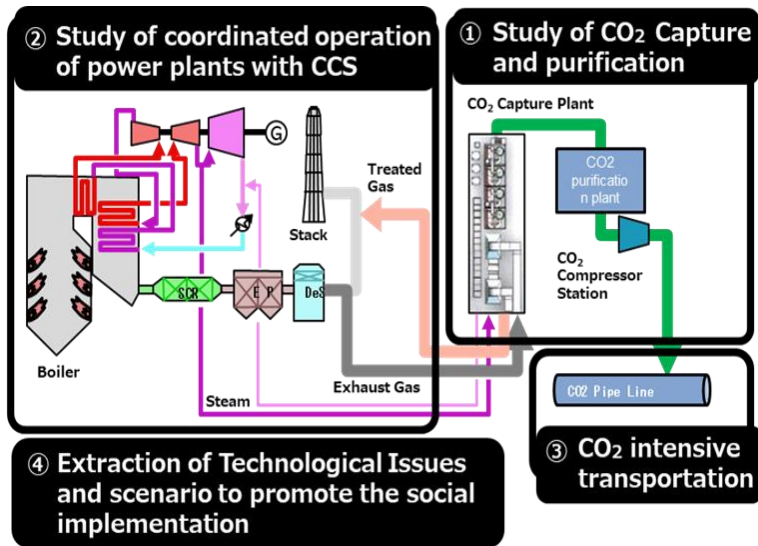
(Units)

	1H	Full Year
<b>FY2020</b>	<b>403</b>	<b>842</b>
<b>FY2021</b>	<b>420</b>	<b>943</b>

# < Appendices >

- Topics in the Second Quarter
- Financial Performance
- Aero engines
- Vehicular turbochargers
- Urban development

## Research project for Carbon dioxide Capture, Utilization and Storage (CCUS) technology for use in coal-fired power stations commissioned by NEDO



<Overall view of the research object>

Hokkaido Electric Power Co., Inc. (“HEPCO”), IHI and JFE Engineering Corporation have been commissioned by the New Energy and Industrial Technology Development Organization (NEDO) to work on an outsourced project\*1.

The purpose of this research is to prepare for the future deployment of CCUS\*2 technology in society by investigating and setting out the issues related to technology for the separation and capture of CO<sub>2</sub> emitted by a large-scale commercial coal-fired power station, and to technology for concentrating the captured CO<sub>2</sub> to enable it to be used. The subject of this research will be HEPCO’s Tomato-Atsuma Power Station.

\*1 Project name: “CCUS research and development/demonstration project / Research related to CCUS technology / Feasibility study related to separation, capture, concentration and use of CO<sub>2</sub> from a high-volume source”

\*2 CCUS is an abbreviation of Carbon dioxide Capture, Utilization and Storage, and refers to the separation of CO<sub>2</sub> from other gases emitted by power stations, factories and other sources, its capture, and its storage or injection deep beneath the ground, as well as the effective use of the separated and stored CO<sub>2</sub>

## IHI Delivers its First Methanation Unit to Asahi Group Facility

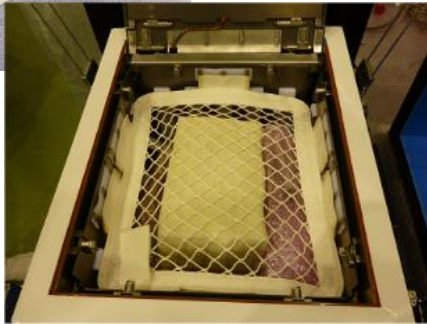
IHI has completed its first methanation system delivery. The recipient is Asahi Quality and Innovations, Ltd. This is an independent research subsidiary of the Asahi Group Holdings, Ltd., a leading Japanese alcoholic and non-alcoholic beverages and food business. The system produces methane\* from carbon dioxide (CO<sub>2</sub>) and hydrogen. The system is installed at the Asahi Group Research and Development Center in Moriya, Ibaraki Prefecture. This will be the first such setup among Japanese food manufacturers to conduct methanation demonstration tests, using CO<sub>2</sub> collected at the center with a view to recycling carbon at Asahi Group plants.

\*Methane is the main component of city gas. Methane synthesized from plant CO<sub>2</sub> emissions could become an alternative to natural gas



<Methanation system installed at Asahi Group Research and Development Center>

## Application development of ultra-low temperature refrigerator-freezer for storage and transportation of biopharmaceuticals



<FROST2 ultra-low temperature refrigerator-freezer  
External view (upper left) and interior (bottom right)>

IHI and IHI Logistics & Machinery Corporation (“ILM”), IHI Group company, are to develop applications in the area of storage and transportation of biopharmaceuticals for the “FROST2” ultra-low temperature refrigerator-freezer jointly developed by IHI Group company IHI Aerospace Co., Ltd., IHI Group company, and Japan Aerospace Exploration Agency (JAXA) for the International Space Station.

FROST2 is a refrigerator-freezer used for the storage of proteins and cells and for various experiments in the Japanese Experiment Module “Kibo” on the International Space Station. In addition to using it as an ultra-low temperature refrigerator-freezer by plugging it into a power supply, even when it is not in a powered state, the use of a high-performance coolant instead of dry ice enables temperatures of -70°C or lower to be maintained at room temperature for at least six hours.

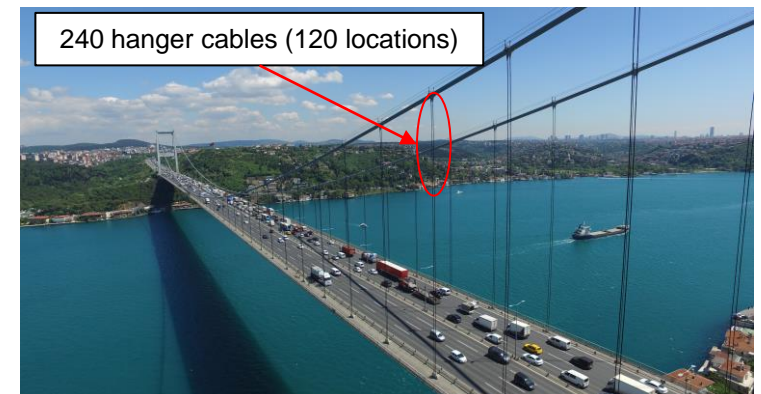
Until now, dry ice has been used for biopharmaceutical storage and transportation, but not only is the maximum dry ice load restricted under the Civil Aeronautics Act, but in recent years the impact of decarbonization has made it difficult to obtain adequate supplies of the raw material used for dry ice. With supplies declining, there is a rising need for new storage and transportation technologies.

Going forward, we will combine the automated warehouse that is ILM’s specialty with the cooling technology applied to FROST2, enabling the storage and transportation of large quantities of active pharmaceutical ingredients for biopharmaceuticals, intermediates, and cell pharmaceuticals, which had previously been difficult to handle in this way.

## Order received for replacing the Hanger Cables of Fatih Sultan Mehmet Bridge Project in Turkey

IHI Infrastructure Systems Co., Ltd. signed, jointly with MAKYOL İnşaat Sanayi Turizm ve Ticaret A.Ş., a leading general constructor in Turkey, a contract for the Replacing the Hanger Cables of Fatih Sultan Mehmet Bridge Project with the owner of the bridge, GENERAL DIRECTORATE OF HIGHWAYS.

The main purpose of this project is to replace hanger cables (which holds the deck of suspension bridge) of Fatih Sultan Mehmet Bridge, which is spanning the Bosphorus strait. Furthermore, maintenance works on installed materials of the bridge, including asphalts renewals of inspection paths and repair of handrails and guardrails are also in the scope of this project.



<Fatih Sultan Mehmet Bridge >

# Financial Performance

(In billion yen)

	Japanese GAAP			
	FY2016	FY2017	FY2018	FY2019
Orders received	1,389.8	1,505.0	1,399.2	1,373.9
Revenue	1,468.3	1,590.3	1,483.4	1,386.5
Operating profit	47.3	72.2	82.4	60.7
Profit attributable to owners of parent	5.2	8.2	39.8	12.8
Cash flows from operating activities	65.3	99.0	46.4	14.5
Cash flows from investing activities	(28.9)	(47.9)	(79.2)	(75.8)
Free cash flows	36.4	51.0	(32.8)	(61.3)
Dividends per share (yen)	0	Interim 3 Year-end 30* (*after share consolidation)	70 (Interim 30, Year-end 40)	50 (Interim 30, Year-end 20)
ROIC (%)	5.0	7.7	8.7	5.7
Operating margin (%)	3.2	4.5	5.6	4.4
CCC (days)	87	83	97	120
D/E ratio (times)	1.10	0.92	0.93	1.38
ROE (%)	1.6	2.6	11.8	3.8
Ratio of equity attributable to owners of parent (%)	18.8	19.9	21.0	18.7

IFRS			
FY2019	FY2020	FY2021.2Q YTD	FY2021 (Forecast)
1,280.0	1,097.0	508.3	1,160.0
1,263.1	1,112.9	516.5	1,180.0
47.8	27.9	26.3	70.0
8.2	13.0	15.1	35.0
42.4	36.3	0.1	60.0
(85.5)	(40.4)	2.7	(30.0)
(43.0)	(4.1)	2.9	30.0
50 (Interim 30, Year-end 20)	0	Interim 30	60 (Interim 30, Year-end 30)
4.1	2.2	-	5.5
3.8	2.5	5.1	5.9
92	124	-	110
2.00	1.85	1.67	1.56
2.8	4.5	-	11.1
15.0	16.4	17.9	

ROIC = (Operating profit + Interest income and dividend income) after tax / (Equity attributable to owners of parent + Interest-bearing liabilities)

CCC = Working capital / Revenue \* 365 days

D/E ratio = Interest-bearing liabilities / Equity

ROE = Profit attributable to owners of parent / Equity attributable to owners of parent

Ratio of equity attributable to owners of parent = Equity attributable to owners of parent / Total liabilities and equity



## Revenue & Number of civil aero engines delivered

	Japanese GAAP								IFRS			Main loading
	'11	'12	'13	'14	'15	'16	'17	'18	'19	'20	'21/2Q	
Revenue (In billion yen)	143.6	169.8	226.0	267.0	299.1	291.5	281.0	318.5	222.4	101.7	54.0	
Accumulated number of civil aero engines delivered (Units)												
V2500	4,980	5,468	5,969	6,469	6,896	7,236	7,508	7,688	7,735	7,740	7,748	Airbus A319/320/321
GE90	1,399	1,589	1,806	2,039	2,257	2,457	2,617	2,715	2,824	2,885	2,902	Boeing B777
CF34	3,242	3,548	3,820	4,156	4,471	4,821	5,085	5,331	5,611	5,798	5,866	For regional jet (70 to 110 seats)
GE9x	118	259	468	751	1,035	1,295	1,542	1,826	2,159	2,328	2,391	Boeing B787/B747-8
PW1100G					16	148	398	1,058	1,784	2,144	2,370	Airbus A320Neo
Passport20							13	66	142	202	240	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>	<b>21,097</b>	<b>21,517</b>	

## Revenue by region

(In billion yen)

	Results										Forecasts	
	Japanese GAAP							IFRS				
	'12	'13	'14	'15	'16	'17	'18	'19	'20	'21		
										2Q YTD	Full year	
<b>Japan</b>	33.9	35.3	37.5	34.6	38.9	39.8	44.6	39.1	35.4	18.8	43.0	
<b>Asia</b>	24.8	29.8	27.5	21.6	15.8	11.7	11.0	10.7	8.5	5.1	10.0	
<b>China</b>	18.1	23.4	24.3	24.9	48.5	71.9	63.1	57.2	66.5	24.9	58.0	
<b>North America</b>	1.3	1.6	1.8	2.4	3.3	8.4	11.6	10.8	9.0	5.2	14.0	
Central and South America	0.0	0.0	0.7	3.4	6.1	7.4	7.5	6.6	6.9	6.1	11.0	
<b>Europe</b>	43.2	60.2	75.6	74.3	61.7	81.1	51.3	28.9	19.9	10.1	21.0	
<b>Others</b>	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	
<b>Total</b>	121.6	150.7	167.7	161.6	174.6	220.5	189.5	153.6	146.6	70.2	157.0	

## (1) Lease revenue in Toyosu

(In billion yen)

	Results											Forecast
	'12	'13	'14	'15	'16	'17	'18	'19	FY2020		FY2021	
									2Q YTD	Full Year	2Q YTD	Full Year
<b>Lease revenue</b>	9.2	9.1	9.3	10.1	9.3	9.2	9.3	9.4	6.1	12.3	6.0	12.0

## (2) Lease revenue and expense in Toyosu (FY2021.2Q)

(In billion yen)


	Lease revenue	Lease expense		Profit
		Depreciation	Others	
<b>FY2021.2Q</b>	6.0	2.6	2.0	1.4

# Development Plan for Toyosu 1 to 3 chome Area

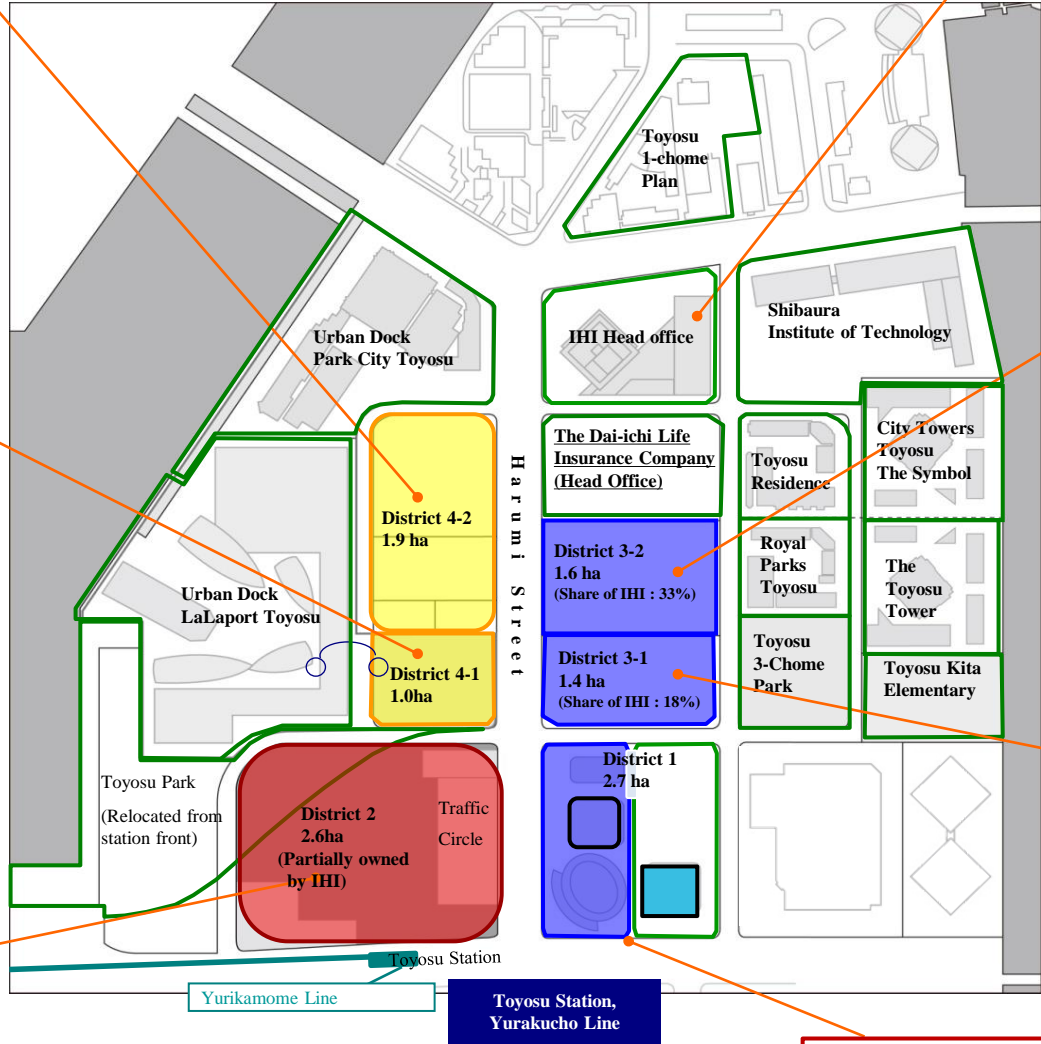
**Development Plan for District 4-2**  
 Site area : 19,493㎡  
 Planned construction schedule from 2022 spring to 2025 spring




**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



**Toyosu Bayside Cross Tower 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



**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 Fire department office
	Office Leasing
	Land Leasing
	Office Leasing (Leased land)
	Category 1 Urban Redevelopment Project*
	Sold, Donated, Exchanged

Property of IHI	Approx. 5ha
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\* 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.