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# **FY2017 Financial Results & FY2018 Forecast**

**May, 2018**  
**Hitachi Zosen Corporation**

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# 1. Overview of FY2017 Consolidated Financial Results

■ **Increase in order intake of stable business of environmental systems in Japan**

■ **Profit deterioration of specific projects at HZI**

# FY2017 Results- Overview

(Unit: Billion Yen)

	FY2016		FY2017		Difference	
	Results		Forecast as of Feb.		Results	
	(A)	(B)	(C)	(C)-(A)	(C)-(B)	
	(Ratio to net sales)	(Ratio to net sales)	(Ratio to net sales)	(Ratio to net sales)	(Ratio to net sales)	
<b>Order intake</b>	<b>398.9</b>	<b>400.0</b>	<b>400.4</b>	<b>1.5</b>	<b>0.4</b>	
<b>Net sales</b>	<b>399.3</b>	<b>360.0</b>	<b>376.4</b>	<b>-22.9</b>	<b>16.4</b>	
<b>Operating income</b>	(3.7%) <b>14.9</b>	(1.8%) <b>6.5</b>	(1.6%) <b>5.9</b>	(-2.1%) <b>-9.0</b>	(-0.2%) <b>-0.6</b>	
<b>Ordinary income</b>	(2.8%) <b>11.2</b>	(1.0%) <b>3.5</b>	(0.9%) <b>3.3</b>	(-1.9%) <b>-7.9</b>	(-0.1%) <b>-0.2</b>	
<b>Net income</b>	(1.5%) <b>5.8</b>	(0.6%) <b>2.0</b>	(0.6%) <b>2.1</b>	(-0.9%) <b>-3.7</b>	(0.0%) <b>0.1</b>	

# FY2017 Results- Order intake

(Unit: Billion Yen)

	FY2016	FY2017		Difference	
	Results (A)	Forecast as of Feb. (B)	Results (C)	(C)-(A)	(C)-(B)
<b>Environmental Systems and Industrial Plants</b>	240.6	260.0	257.2	16.6	-2.8
<b>Machinery</b>	106.9	95.0	98.4	-8.5	3.4
<b>Infrastructure</b>	33.2	35.0	31.4	-1.8	-3.6
<b>Others</b>	18.2	10.0	13.4	-4.8	3.4
<b>Total</b>	398.9	400.0	400.4	1.5	0.4

# FY2017 Results- Net sales

(Unit: Billion Yen)

	FY2016	FY2017		Difference	
	Results (A)	Forecast as of Feb. (B)	Results (C)	(C)-(A)	(C)-(B)
<b>Environmental Systems and Industrial Plants</b>	254.6	215.0	231.8	-22.8	16.8
<b>Machinery</b>	103.7	100.0	100.6	-3.1	0.6
<b>Infrastructure</b>	29.2	30.0	28.2	-1.0	-1.8
<b>Others</b>	11.8	15.0	15.8	4.0	0.8
<b>Total</b>	399.3	360.0	376.4	-22.9	16.4

# FY2017 Results- Operating income

(Unit: Billion Yen)

	FY2016	FY2017		Difference	
	Results (A)	Forecast as of Feb. (B)	Results (C)	(C)-(A)	(C)-(B)
<b>Environmental Systems and Industrial Plants</b>	11.3	2.0	1.3	-10.0	-0.7
<b>Machinery</b>	2.2	3.0	2.5	0.3	-0.5
<b>Infrastructure</b>	1.0	1.0	1.4	0.4	0.4
<b>Others</b>	0.4	0.5	0.7	0.3	0.2
<b>Total</b>	14.9	6.5	5.9	-9.0	-0.6



(Unit: Billion Yen)

<b>FY2016 Operating income</b>		<b>14.9</b>
<b>Breakdown of decrease in Operating income</b>	<ul style="list-style-type: none"> <li>▪ Profit deterioration of specific projects at HZI</li> </ul>	-8.2
	<ul style="list-style-type: none"> <li>▪ Improvement of profitability of Machinery, Infrastructure and Others</li> </ul>	+0.9
	<ul style="list-style-type: none"> <li>▪ Increase in SGA, and others</li> </ul>	-1.7
<b>FY2017 Operating income</b>		<b>5.9</b>

## Non-operating income

(Unit: Billion Yen)

	FY2016 (A)	FY2017 (B)	Difference (B)-(A)
Net interest expense	-0.5	-0.6	-0.1
Equity in net income of affiliates	0.7	0.5	-0.2
Others	-3.9	-2.5	1.4
<b>Total</b>	<b>-3.7</b>	<b>-2.6</b>	<b>1.1</b>

## Extraordinary profit and loss

(Unit: Billion Yen)

	FY2016 (A)	FY2017 (B)	Difference (B)-(A)	
Extraordinary profit	Profit from sale of fixed assets	1.4	—	-1.4
Extraordinary loss	Loss from overseas projects	-3.0	—	3.0
<b>Total</b>	<b>-1.6</b>	<b>—</b>	<b>1.6</b>	

## Cash flows

(Unit: Billion Yen)

	FY2016 (A)	FY2017 (B)	Difference (B)-(A)
Cash flows from operating activities	17.3	-3.4	-20.7
Cash flows from investing activities	-7.0	-10.7	-3.7
Cash flows from financing activities	-8.4	-4.0	4.4
Increase in cash and cash equivalents	(*1) 1.2	-18.1	-19.3
Cash and cash equivalents at beginning	49.6	50.8	1.2
Cash and cash equivalents at end	50.8	32.7	-18.1

## Interest-bearing debt

(Unit: Billion Yen)

	FY2016 (A)	FY2017 (B)	Difference (B)-(A)
Borrowings	(*2) 99.2	(*2) 97.2	-2.0
Bond	10.0	10.0	0.0
<b>Total</b>	<b>109.2</b>	<b>107.2</b>	<b>-2.0</b>

(\*1)Including translation gains and losses, which is -0.7 (\*2)Including lease debt

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## 2. Forecast of FY2018

(Unit: Billion Yen)

	FY2017		FY2018		Difference
	Results		Forecast		(B)-(A)
	(A)	Forecast as of May 2017	Forecast as of May 2018 (B)		
	(Ratio to net sales)	(Ratio to net sales)	(Ratio to net sales)	(Ratio to net sales)	
<b>Order intake</b>	<b>400.4</b>	<b>430.0</b>	<b>430.0</b>	<b>29.6</b>	
<b>Net sales</b>	<b>376.4</b>	<b>400.0</b>	<b>380.0</b>	<b>3.6</b>	
<b>Operating income</b>	(1.6%) <b>5.9</b>	(4.1%) <b>16.5</b>	(3.3%) <b>12.5</b>	(1.7%) <b>6.6</b>	
<b>Ordinary income</b>	(0.9%) <b>3.3</b>	(3.5%) <b>14.0</b>	(2.4%) <b>9.0</b>	(1.5%) <b>5.7</b>	
<b>Net income</b>	(0.6%) <b>2.1</b>	(2.0%) <b>8.0</b>	(1.3%) <b>5.0</b>	(0.7%) <b>2.9</b>	

(Unit: Billion Yen)

	FY2017 Results (A)	FY2018 Forecast (B)	Difference (B)-(A)
Environmental Systems and Industrial Plants	257.2	280.0	22.8
Machinery	98.4	100.0	1.6
Infrastructure	31.4	40.0	8.6
Others	13.4	10.0	-3.4
<b>Total</b>	<b>400.4</b>	<b>430.0</b>	<b>29.6</b>

(Unit: Billion Yen)

	FY2017 Results (A)	FY2018 Forecast (B)	Difference (B)-(A)
Environmental Systems and Industrial Plants	231.8	240.0	8.2
Machinery	100.6	100.0	-0.6
Infrastructure	28.2	30.0	1.8
Others	15.8	10.0	-5.8
<b>Total</b>	<b>376.4</b>	<b>380.0</b>	<b>3.6</b>

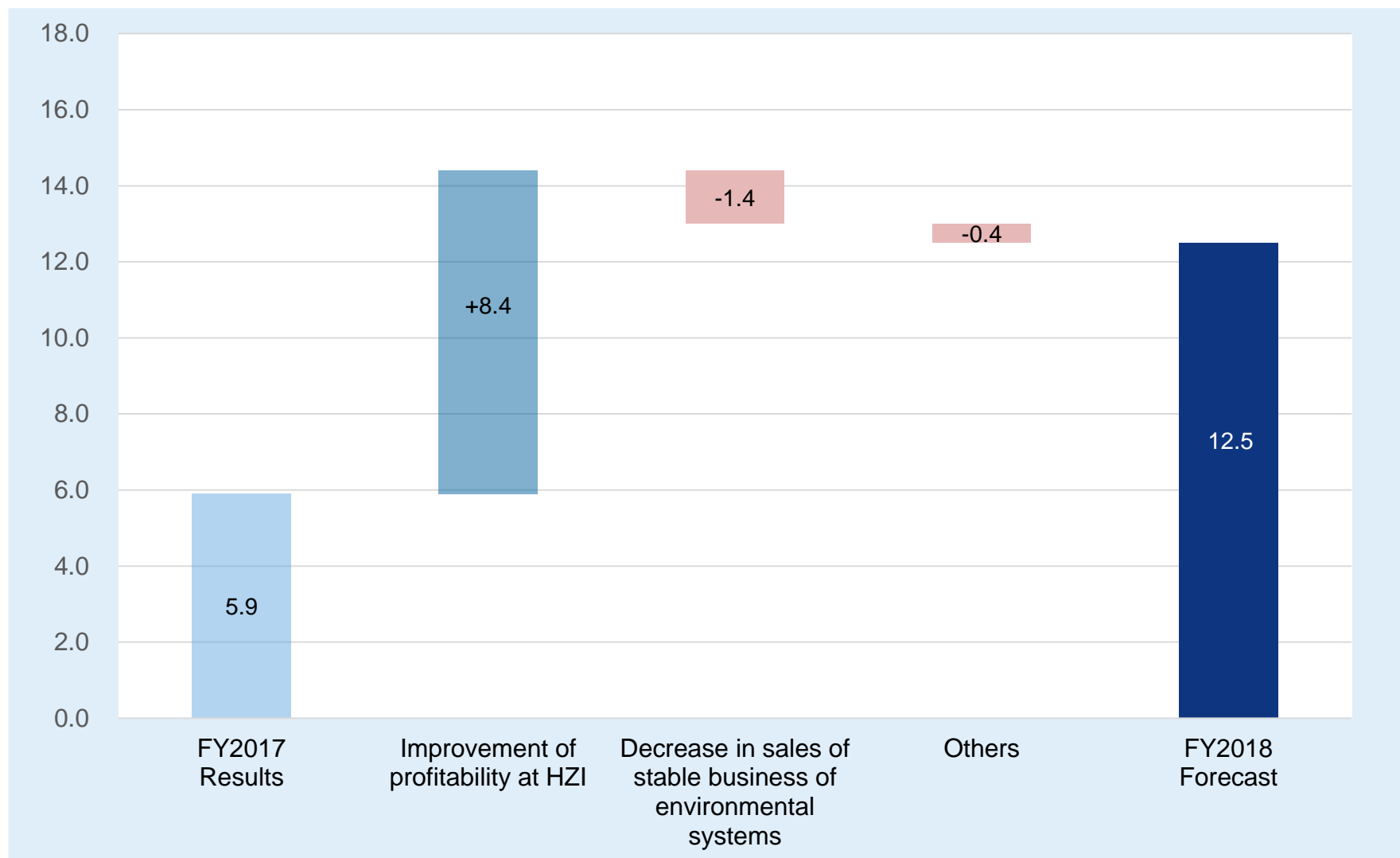
(Unit: Billion Yen)

	FY2017 Results (A)	FY2018 Forecast (B)	Difference (B)-(A)
Environmental Systems and Industrial Plants	1.3	9.0	7.7
Machinery	2.5	2.0	-0.5
Infrastructure	1.4	1.0	-0.4
Others	0.7	0.5	-0.2
<b>Total</b>	<b>5.9</b>	<b>12.5</b>	<b>6.6</b>



# FY2018 Forecast-Breakdown of increase in Operating income

(Unit: Billion Yen)



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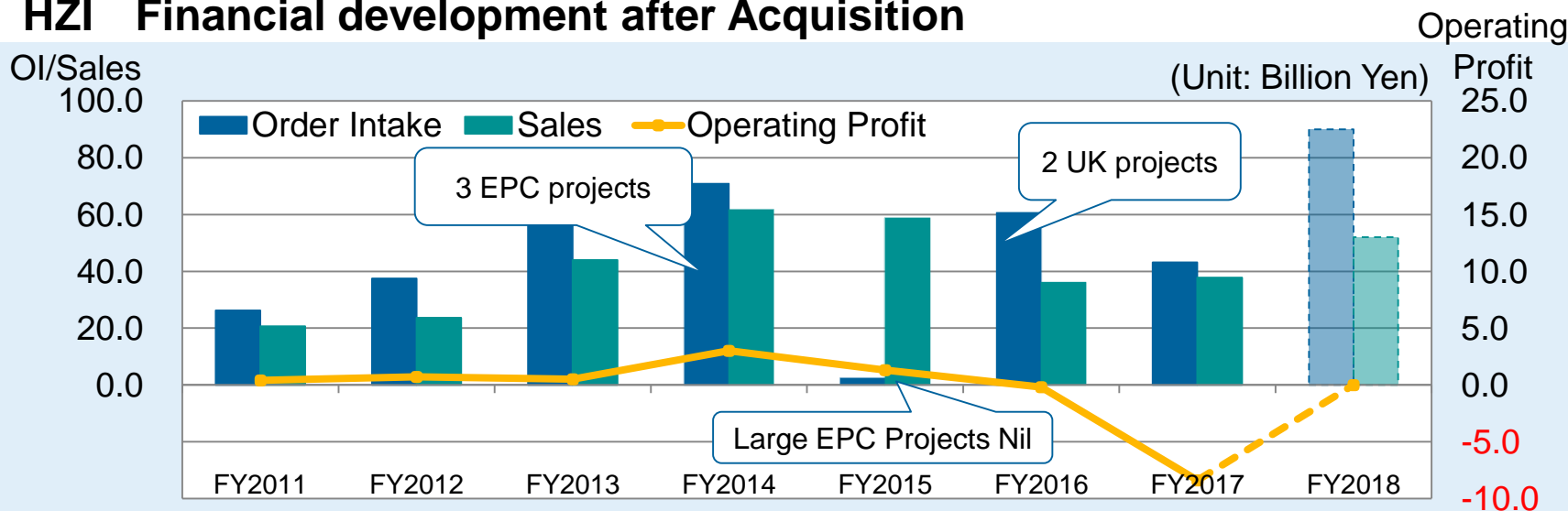
## 3. FY2017 Topics

### ■ HZI Business Description

EfW : Energy from Waste

Item	
Main Business Lines	Thermal EfW: Grate Combustion, Biological EfW: Kompogas-Dry Anaerobic Digestion, Biogas upgrading
Target Market	Europe, Middle East, North America
Market position	No.1 share in Europe (2014-2016)
Customers	Waste management companies, local municipalities
Location	HQ: Switzerland – RG & Service: Switzerland, Germany Sales: US, UAE, Australia

### ■ HZI Financial development after Acquisition



Profit deterioration due to shortage of engineers after consecutive wins in FY2014 and cost overruns from projects secured in FY2016 (insufficient cost allocation).

**Root cause**

**Counter Measures**

**Hitz**

- **Insufficiency of Hitz Governance**
  - Insufficient monitoring and guidance over local management

- **New CEO Appointed**
  - Experience in Power plant construction to be as project manager
- **Enhancement of Governance system**
  - Chairman sent from Hitz to be in Zurich full time
  - Increase board activities frequency, agenda review, closer cooperation with Hitz
- **Enhancement risk management system**
  - Project office: dedicated for project monitoring,

Hitz senior engineer assigned

**HZI**

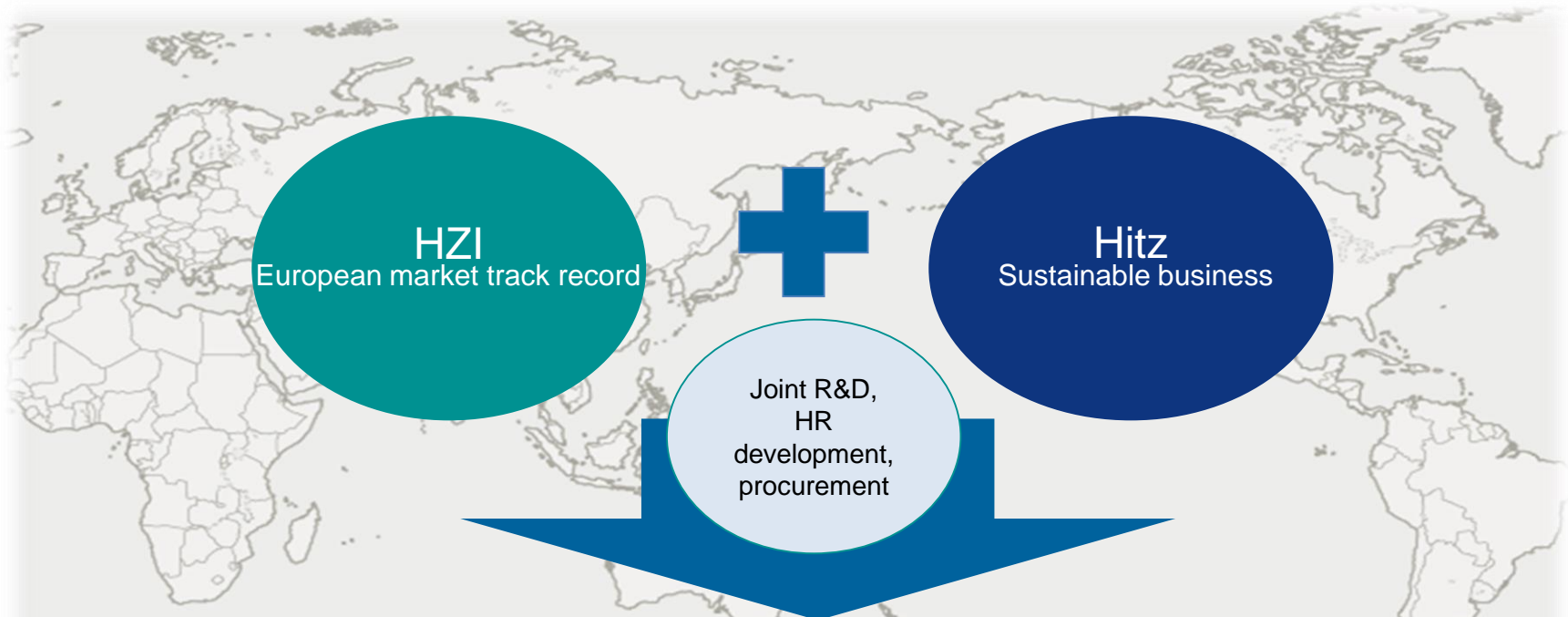
- **Management Issues**
  - Project Monitoring
  - Project Execution System and Model
  - Over dependency on EPC (Delay in AOM expansion)
- **Insufficient internal communication**
- **Intensified Market Competition**
  - Lower margins as sold
  - Increase in full turn-key projects

- **New CEO leads revival plan (4P12A)**  
 ...4 Priorities, 12 Actions

Priority 1 : EPC business fixture  
 Priority 2 : Team capability reinforcement  
 Priority 3 : Diversification of income streams  
 Priority 4 : Enhancing Competitiveness

### ■ EfW business global expansion(maximize HZI potentials)

- Challenge EfW business expansion for the contribution to achieve the global environment protection and build the society and social infrastructure to secure comfortable and safety life.
- For the purpose, Hitz maximize the advantage of track record, knowhow, and network, which HZI built up in European market. And Hitz activates HZI as a platform to develop global talents.
- HZI expands sustainable business based on the knowhow Hitz has developed.
- Accelerate joint R&D and business development activities.



**Solution Provider to achieve circular society**

## ■ Business Environment

- Due to decline in population and an increase in aging/ integrated facilities, the number of general waste disposal facilities in Japan is likely to decrease.
- Our customers' challenges: Aging facilities and budget cuts

## ■ New Approach

- Commented process acceleration for development, proposal presentation and commercialization to evade income decrease resulting from decline in facility numbers in order to secure future growth and income flow of the continuous business

### (1) Expanding order stocks for fundamental facility in improvement works

- Proposing a second improvement work aiming for a 60 year useful life
- Increase in order stocks of improvement works resulting from these offers

### (2) Expanding orders on temporary fixes/special works

- Tailor made solutions proposed to customers

**Environment/Plant Department Stable Business Performance  
(includes fundamental facility improvement works) (Billion Yen)**

	Actual			Forecast
Fiscal Year	2015	2016	2017	2018
Order intake	156.4	123.6	170.4	135.0
Sales	119.0	124.6	134.4	125.0
Operating income	14.3	16.2	13.9	12.5

### ■ Profit Overview

- Marking below pa both for FY2017 actual and FY2018 forecast.

### ■ Price Trend

- Despite several years of continuous negotiation for a price raise, a price down is inevitable due to decline in ship price and stagnant order intake by domestic shipyards.

### ■ Measures for Positive Profitability

- Continue being selective with orders
- Expand After-service business(expand service menu, increase personnel, strengthen actions for target markets)
- Differentiation of technology(focus on Marine SCR system(※) orders : 21 orders in total)



(※) Marine SCR(Selective Catalytic Reduction) system: device that removes NOx emitted from Marine Diesel Engine through a catalyst

Business Performance of Marine Diesel Engine (Billion Yen)

Fiscal Year	Actual			Forecast
	2015	2016	2017	2018
Order intake	35.4	20.8	17.7	18.5
Sales	25.4	25.5	20.4	21.0
Operating income	-2.6	-0.4	-0.3	-0.5

### ■ Customer Overview

- Global automobile production by Japanese automobile manufacturers is firm, but the future is unclear.

### ■ Market for Press Machine

- The number of orders in Press Machine business is linked with the sales forecast for the next several years measured by Japanese automobile manufacturers.
- Manufacturers being cautious towards in capital investments.

### ■ Price and Shares

- The price has been down by around 10% in the past few years, but seeing some recovery lately.
- Share: *circa.* 30% (FY2017 actual number in Large/ super large Press Machine market\_ Japan Forming Machinery Association Statistics)

### ■ Approach to Profit Improvement

- Identify customer needs at early stage.
- Introduce new materials to lighten vehicle weight (Super High Tensile Strength Steel, Aluminum etc....)
- Propose products matching customer needs→Taking advantages in sales activities and securing orders.

**Business Performance in Press Machine (Billion Yen)**

	Actual			Forecast
Fiscal Year	2015	2016	2017	2018
Order intake	22.9	23.6	22.9	21.5
Sales	23.4	24.1	24.4	21.0
Operating income	2.7	2.3	1.0	1.0



### V-TEX doubled the production facility of vacuum valves for semiconductors

#### ■ Background

- Firm increase in demand expected product capability strengthened.
- Aiming to expand business by reinforcing capabilities at Tokai Works & Korea Works

#### ■ Investments

- Tokai Works (Hitachinaka-city, Ibaraki prefecture)  
New building with clean room for vacuum valves
- Korea Works  
Expansion of clean room, modifying existing facilities  
Invested amount: *circa.* 1.5 billion yen

Business Performance in Systematic Machinery (Billion Yen)

	Actual			Forecast
Fiscal Year	2015	2016	2017	2018
Order intake	17.1	28.7	27.0	27.0
Sales	23.0	21.8	27.0	26.0
Operating income	-1.0	0.2	1.5	1.2

※ Vacuum valves  
valves to restrict the flow of air used during the production process of semiconductors & organic electroluminescence panels

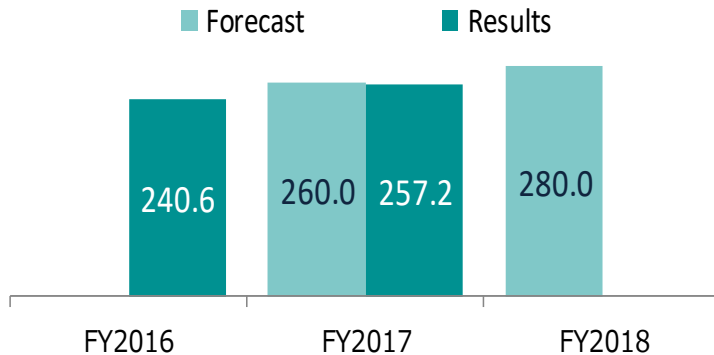
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## 4. Details by Segments

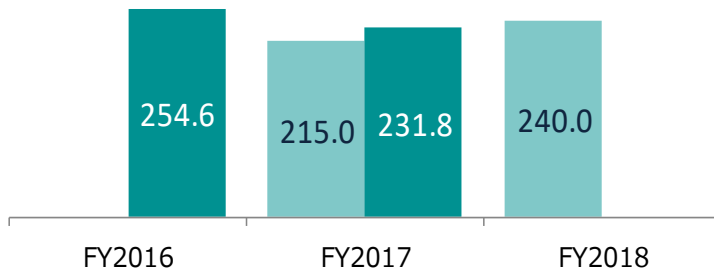
(Unit: Billion Yen)

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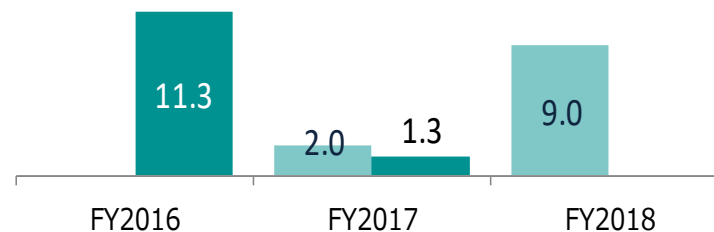
## 【Order intake】



## 【Net sales】



## 【Operating income】



## Order intake

### ■ FY2017 Results (vs. FY2016)

257.2(+16.6)

- Increase in AOM (both long term operation of EfW plants and upgrade of old EfW plants in Japan)

### ■ FY2018 Forecast (vs. FY2017)

280.0(+22.8)

- Increase in large EfW plants at HZI

## Net sales

### ■ FY2017 Results (vs. FY2016)

231.8(-22.8)

- Decrease in progress of desalination plant project in Qatar

### ■ FY2018 Forecast (vs. FY2017)

240.0(+8.2)

- Increase in successful progress of EfW plant in Istanbul, of which HZI has received order
- Decrease in stable business in Japan

## Operating income

### ■ FY2017 Results (vs. FY2016)

1.3(-10.0)

- Profit deterioration of specific projects at HZI

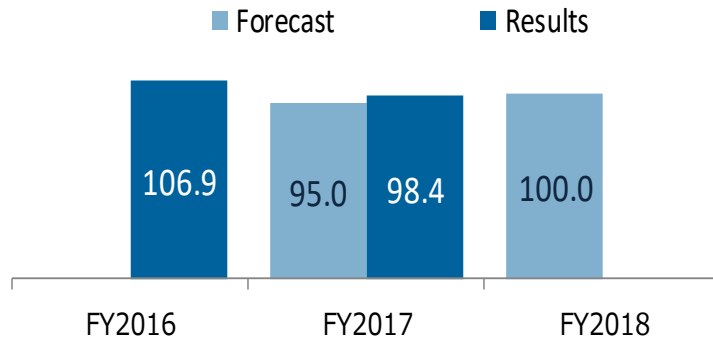
### ■ FY2018 Forecast (vs. FY2017)

9.0(+7.7)

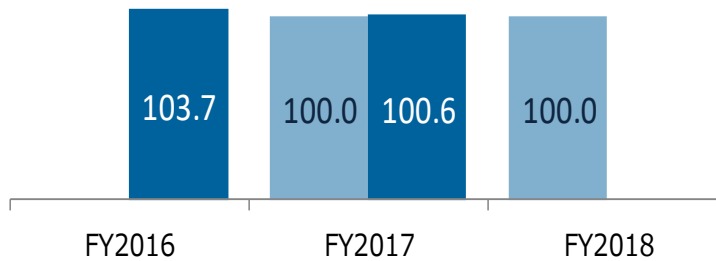
- Improvement of profitability at HZI

## 【Order intake】

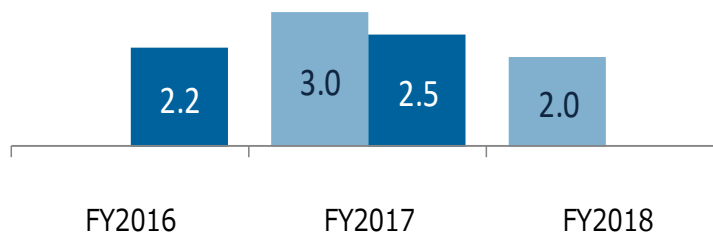
(Unit: Billion Yen)



## 【Net sales】



## 【Operating income】



(Unit: Billion Yen)

### Order intake

#### ■ FY2017 Results (vs. FY2016)

98.4(-8.5)

- Decrease in marine diesel engine orders and postponement of process equipment order

#### ■ FY2018 Forecast (vs. FY2017)

100.0(+1.6)

- Recovery of marine diesel engine and process equipment

### Net sales

#### ■ FY2017 Results (vs. FY2016)

100.6(-3.1)

- Increase in systematic machinery didn't cover decrease in marine diesel engine and process equipment.

#### ■ FY2018 Forecast (vs. FY2017)

100.0(-0.6)

- Decrease in press machine

### Operating income

#### ■ FY2017 Results (vs. FY2016)

2.5(+0.3)

- Increase in systematic machinery covered decrease in press machine.

#### ■ FY2018 Forecast (vs. FY2017)

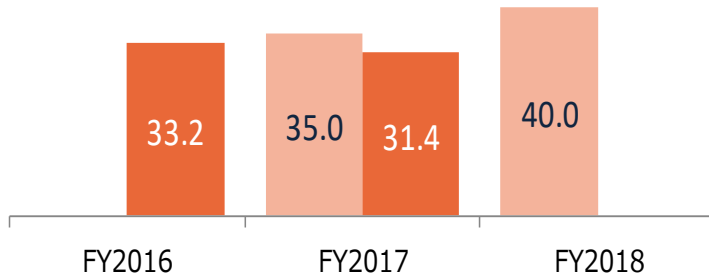
2.0(-0.5)

- Delay in Improvement of profitability of marine diesel engine

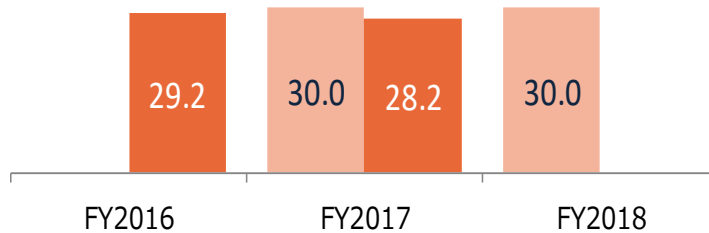
(Unit: Billion Yen)

## 【Order intake】

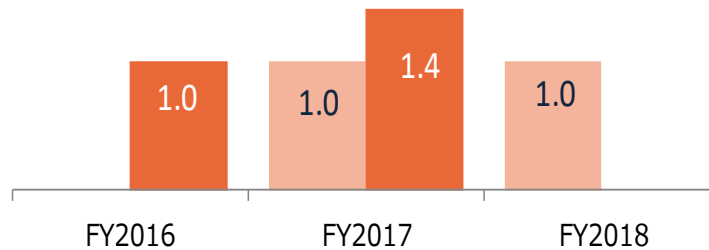
■ Forecast ■ Results



## 【Net sales】



## 【Operating income】



(Unit: Billion Yen)

## Order intake

### ■FY2017 Results (vs. FY2016)

31.4(-1.8)

### ■FY2018 Forecast (vs. FY2017)

40.0(+8.6)

- Recovery of shield tunneling machine projects order

## Net sales

### ■FY2017 Results (vs. FY2016)

28.2(-1.0)

- Decrease in large marine civil engineering projects

### ■FY2018 Forecast (vs. FY2017)

30.0(+1.8)

## Operating income

### ■FY2017 Results (vs. FY2016)

1.4(+0.4)

- Improvement of profitability

### ■FY2018 Forecast (vs. FY2017)

1.0(-0.4)

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## **5. Support Documentation (Details by small Segments)**

# Results and Forecast (By Small Segment of Environmental Systems & Industrial Plants)

(Unit: Billion Yen)

		FY2015	FY2016	FY2017			FY2018	Difference		
		Results	Results (A)	Forecast as of May	Forecast as of Nov.	Forecast as of Feb. (B)	Results (C)	Forecast	(C)-(A)	(C)-(B)
Order intake	EPC	127.3	117.0	125.0	106.0	91.0	86.8	145.0	-30.2	-4.2
	Stable Business	156.4	123.6	130.0	149.0	169.0	170.4	135.0	46.8	1.4
	Total	283.7	240.6	255.0	255.0	260.0	257.2	280.0	16.6	-2.8
Net sales	EPC	122.6	130.0	94.0	91.0	91.0	97.4	115.0	-32.6	6.4
	Stable Business	119.0	124.6	121.0	124.0	124.0	134.4	125.0	9.8	10.4
	Total	241.6	254.6	215.0	215.0	215.0	231.8	240.0	-22.8	16.8
Operating income	EPC	0.5	-4.9	-3.6	-5.6	-11.6	-12.6	-3.5	-7.7	-1.0
	Stable Business	14.3	16.2	12.1	13.6	13.6	13.9	12.5	-2.3	0.3
	Total	14.8	11.3	8.5	8.0	2.0	1.3	9.0	-10.0	-0.7

# Results and Forecast (By Small Segment of Machinery)

(Unit: Billion Yen)

		FY2015	FY2016	FY2017			FY2018	Difference		
		Results	Results (A)	Forecast as of May	Forecast as of Nov.	Forecast as of Feb. (B)	Results (C)	Forecast	(C)-(A)	(C)-(B)
Order intake	Marine Diesel Engine	35.4	20.8	17.5	17.5	17.5	17.7	18.5	-3.1	0.2
	Press Machine	22.9	23.6	20.0	20.0	20.0	22.9	21.5	-0.7	2.9
	Process Equipment	16.9	18.3	20.0	19.0	16.0	15.1	16.0	-3.2	-0.9
	Systematic Machinery	17.1	28.7	27.0	28.0	26.0	27.0	27.0	-1.7	1.0
	Others	14.9	15.5	15.5	15.5	15.5	15.7	17.0	0.2	0.2
	Total	107.2	106.9	100.0	100.0	95.0	98.4	100.0	-8.5	3.4
Net sales	Marine Diesel Engine	25.4	25.5	21.0	21.0	21.0	20.4	21.0	-5.1	-0.6
	Press Machine	23.4	24.1	21.5	21.5	23.0	24.4	21.0	0.3	1.4
	Process Equipment	16.0	16.4	17.0	14.0	13.5	13.7	16.0	-2.7	0.2
	Systematic Machinery	23.0	21.8	25.0	28.0	27.0	27.0	26.0	5.2	0.0
	Others	16.7	15.9	15.5	15.5	15.5	15.1	16.0	-0.8	-0.4
	Total	104.5	103.7	100.0	100.0	100.0	100.6	100.0	-3.1	0.6
Operating income	Marine Diesel Engine	-2.6	-0.4	0.0	0.0	0.0	-0.3	-0.5	0.1	-0.3
	Press Machine	2.7	2.3	1.4	1.2	1.2	1.0	1.0	-1.3	-0.2
	Process Equipment	0.9	0.0	0.2	0.2	0.2	0.3	0.2	0.3	0.1
	Systematic Machinery	-1.0	0.2	0.6	1.3	1.3	1.5	1.2	1.3	0.2
	Others	-0.8	0.1	0.3	0.3	0.3	0.0	0.1	-0.1	-0.3
	Total	-0.8	2.2	2.5	3.0	3.0	2.5	2.0	0.3	-0.5





# Technology for People, the Earth, and the Future

**Hitachi Zosen creates links between mother nature and our future**

**Cautionary Statement**

Forward-looking statements are based on information currently available to Hitachi Zosen Corporation. Therefore those forward-looking statements include unknown risks and uncertainties. Accordingly, you should note that the actual results could differ materially from those forward-looking statements. Risks and uncertainties that could influence the ultimate outcome include, but are not limited to, the economic conditions surrounding Hitachi Zosen Corporation and/or exchange rate fluctuation.



Hitachi Zosen Corporation

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