



Mega Solar Power Plant 1.5MW, Innoshima works Hiroshima

# Financial Results

For the six months  
ended September 30, 2013



Hitachi Zosen Corporation

November 1, 2013

President & COO Takashi Tanisho

1. Overview of Financial Results  
for the six months ended September 30, 2013
2. Forecast of FY2013
3. Details by Segment
4. Progress of Mid Term Business Plan “Hitz Vision”

# Key Points of the First Half of FY2013 Results

- Booked operating loss in the 1<sup>st</sup> half  
due to the decrease in sales of profitable projects
  
- FY2013 P/L forecast remains unchanged reflecting:
  - Increase of profit in AOM business of Environmental systems & industrial plants segment is expected
  - Business reform effort in Infrastructure segment
  - Fixed cost absorption via increase of Net sales

(\* )AOM: After service, Operation, Maintenance

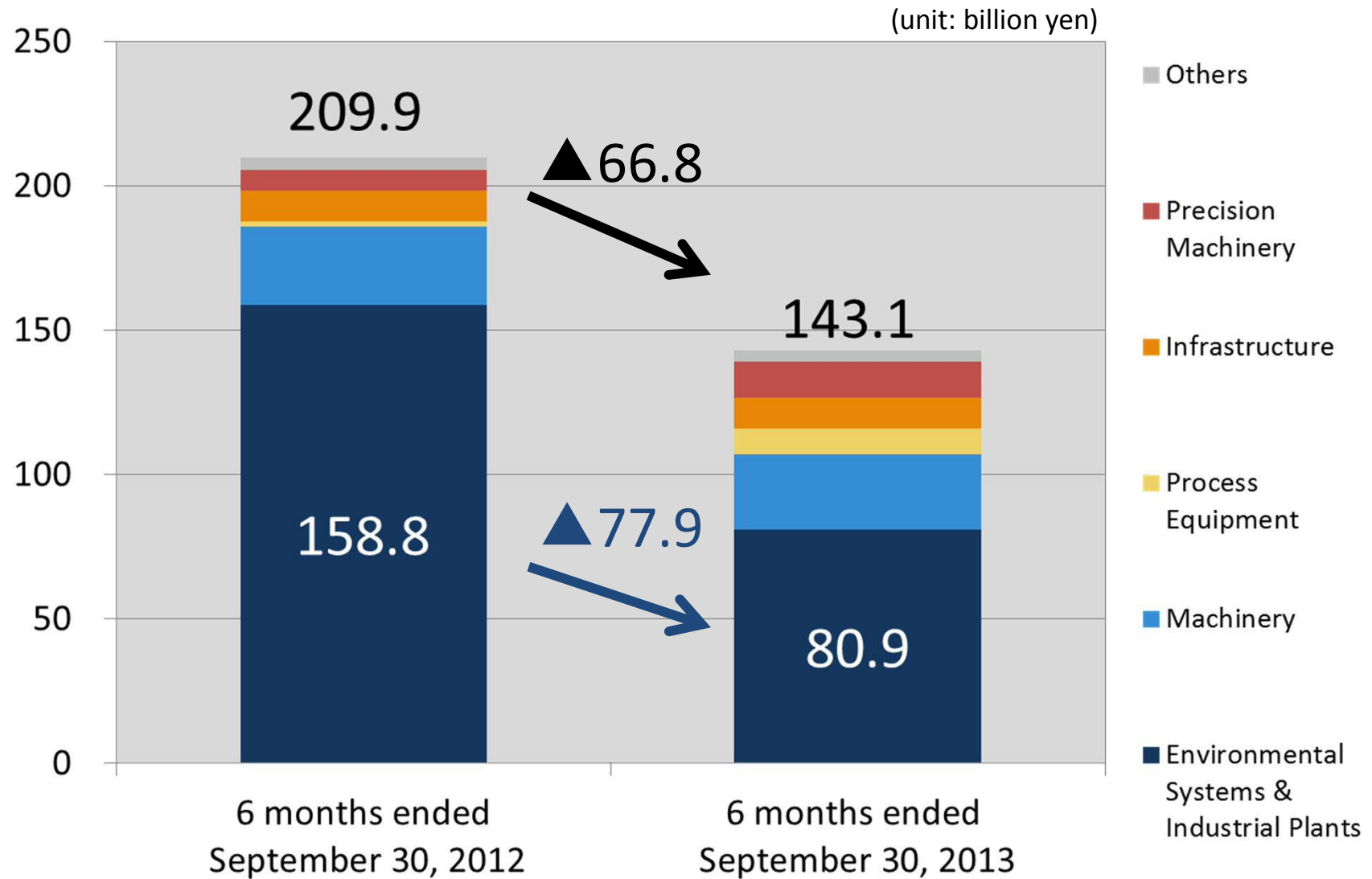
**1. OVERVIEW OF FINANCIAL RESULTS  
FOR THE SIX MONTHS ENDED SEPTEMBER 30, 2013**

# The First Half of FY2013 / Overview

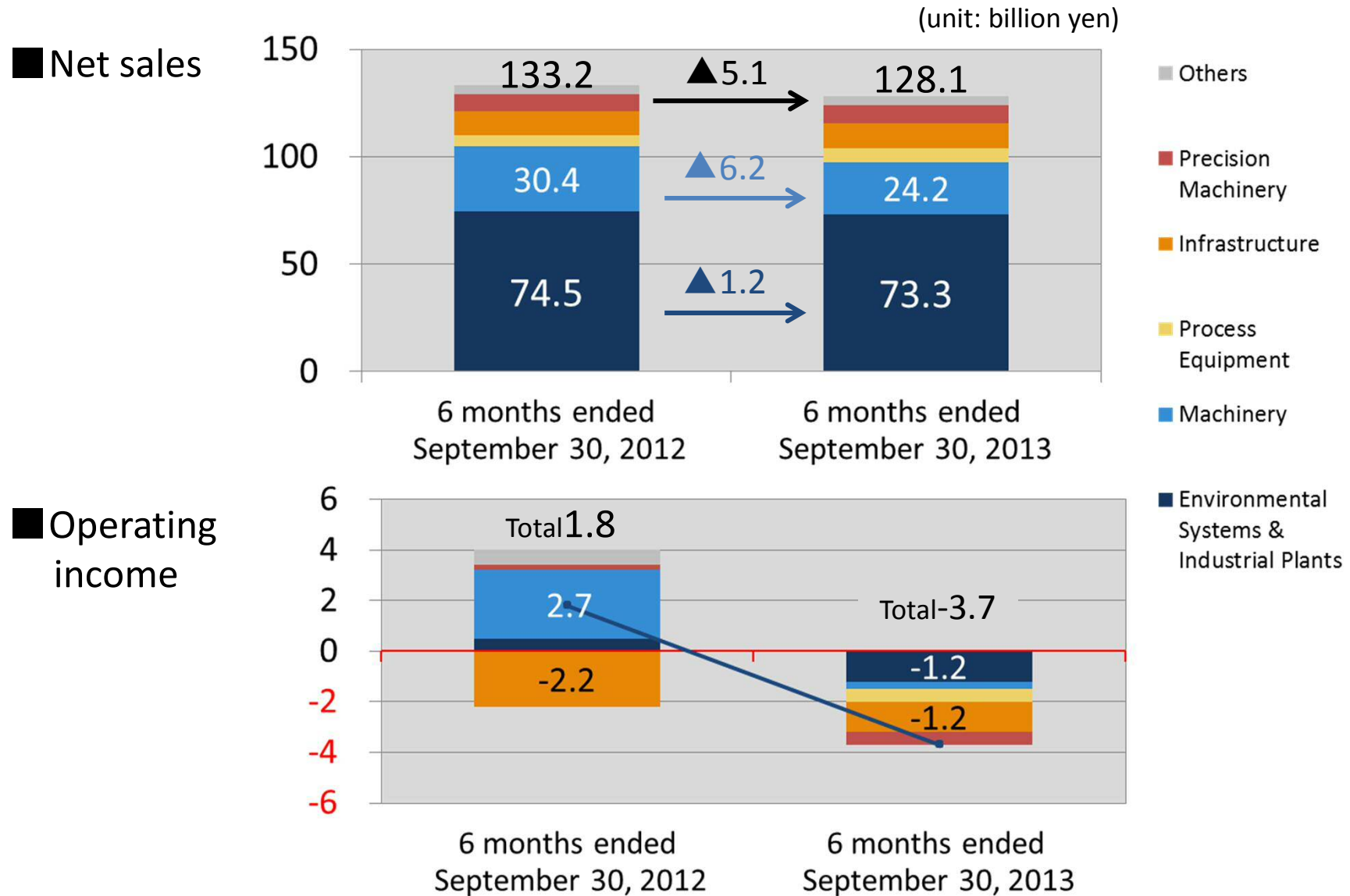
(unit: billion yen)

	6 months ended September 30, 2012	6 months ended September 30, 2013	Difference
Order intake	209.9	143.1	▲66.8
Net sales	133.2	128.1	▲5.1
Operating income	1.8	▲3.7	▲5.5
(ratio)	1.4%	▲2.9%	▲4.3%
Non-operating P&L	0.2	▲0.1	▲0.3
Ordinary income	2.0	▲3.8	▲5.8
(ratio)	1.5%	▲3.0%	▲4.5%
Extraordinary P&L	▲0.8	—	0.8
Income tax & minority interests	▲0.4	▲0.2	0.2
Net income	0.8	▲4.0	▲4.8
(ratio)	0.6%	▲3.2%	▲3.8%

# The First Half of FY2013 / Order intake



# The First Half of FY2013 / Net sales & Operating income



# The First Half of FY2013 / by segment

(unit: billion yen)

		Environ- mental Systems & Industrial Plants	Machinery	Process Equipment	Infra- structure	Precision Machinery	Others	Total
<b>6 months ended September 30, 2013</b>	Order intake	80.9	26.1	9.0	10.5	12.6	4.0	143.1
	Net sales	73.3	24.2	6.2	12.0	8.2	4.2	128.1
	Operating income	▲1.2	▲0.3	▲0.5	▲1.2	▲0.5	0.0	▲3.7
<b>6 months ended September 30, 2012</b>	Order intake	158.8	27.1	1.9	10.4	7.4	4.3	209.9
	Net sales	74.5	30.4	5.0	11.2	7.8	4.3	133.2
	Operating income	0.5	2.7	0.0	▲2.2	0.2	0.6	1.8
<b>Difference</b>	Order intake	▲77.9	▲1.0	7.1	0.1	5.2	▲0.3	▲66.8
	Net sales	▲1.2	▲6.2	1.2	0.8	0.4	▲0.1	▲5.1
	Operating income	▲1.7	▲3.0	▲0.5	1.0	▲0.7	▲0.6	▲5.5



# The First Half of FY2013 / Increase & Decrease of Operating P&L

(unit: billion yen)

<b>Operating P&amp;L for 6 months ended September 30, 2012</b>			<b>1.8</b>
Breakdown	Decrease of Net sales (-5.1)	▲0.8	▲5.5
	Decrease of profitable projects in Environmental Systems & Industrial Plants	▲2.1	
	Decline of profit margin in Machinery	▲2.4	
	Decline of profit margin in Precision Machinery	▲0.7	
	Cost reduction	0.5	
<b>Operating P&amp;L for 6 months ended September 30, 2013</b>			<b>▲3.7</b>

# The First Half of FY2013 / Non-operating P&L, Extraordinary P&L

(unit: billion yen)

	6 months ended September 30, 2012	6 months ended September 30, 2013	Difference
Interest expenses	▲0.6	▲0.5	0.1
Dividend income	0.1	0.1	0.0
Equity in net income of affiliates	0.9	▲0.8	▲1.7
Other Non-operating income	▲0.2	1.1	1.3
<b>Non-operating P&amp;L</b>	<b>0.2</b>	<b>▲0.1</b>	<b>▲0.3</b>

Extraordinary Loss	Contribution for withdrawal from employees' pension fund	▲0.8	—	0.8
<b>Extraordinary P&amp;L</b>		<b>▲0.8</b>	<b>—</b>	<b>0.8</b>

# The First Half of FY2013 / Cash flows & Interest bearing debt **Hitz**

Hitachi Zosen

(unit: billion yen)

Cash flows	6 months ended September 30, 2012	6 months ended September 30, 2013	Difference
Cash flows from operating activities	8.1	▲4.1	▲12.2
Cash flows from investing activities	▲3.4	▲1.8	1.6
Cash flows from financing activities	▲19.4	▲6.0	13.4
Net increase in cash & cash equivalents	(*1) ▲14.6	(*1) ▲11.0	3.6
Cash & cash equivalents at beginning	66.6	56.4	▲10.2
Cash & cash equivalents at end	(*2) 52.1	(*2) 45.4	▲6.7

(\*1) including effect of exchange rate (1<sup>st</sup> half 2012: +0.1, 1<sup>st</sup> half 2013: +0.9)

(\*2) including other increase and decrease

(unit: billion yen)

Interest bearing debt	March 2013	September 2013	Difference
Bank borrowing (incl. Lease liabilities)	92.6	88.8	▲3.8
Bond issues	10.0	10.0	0.0
Total	102.6	98.8	▲3.8

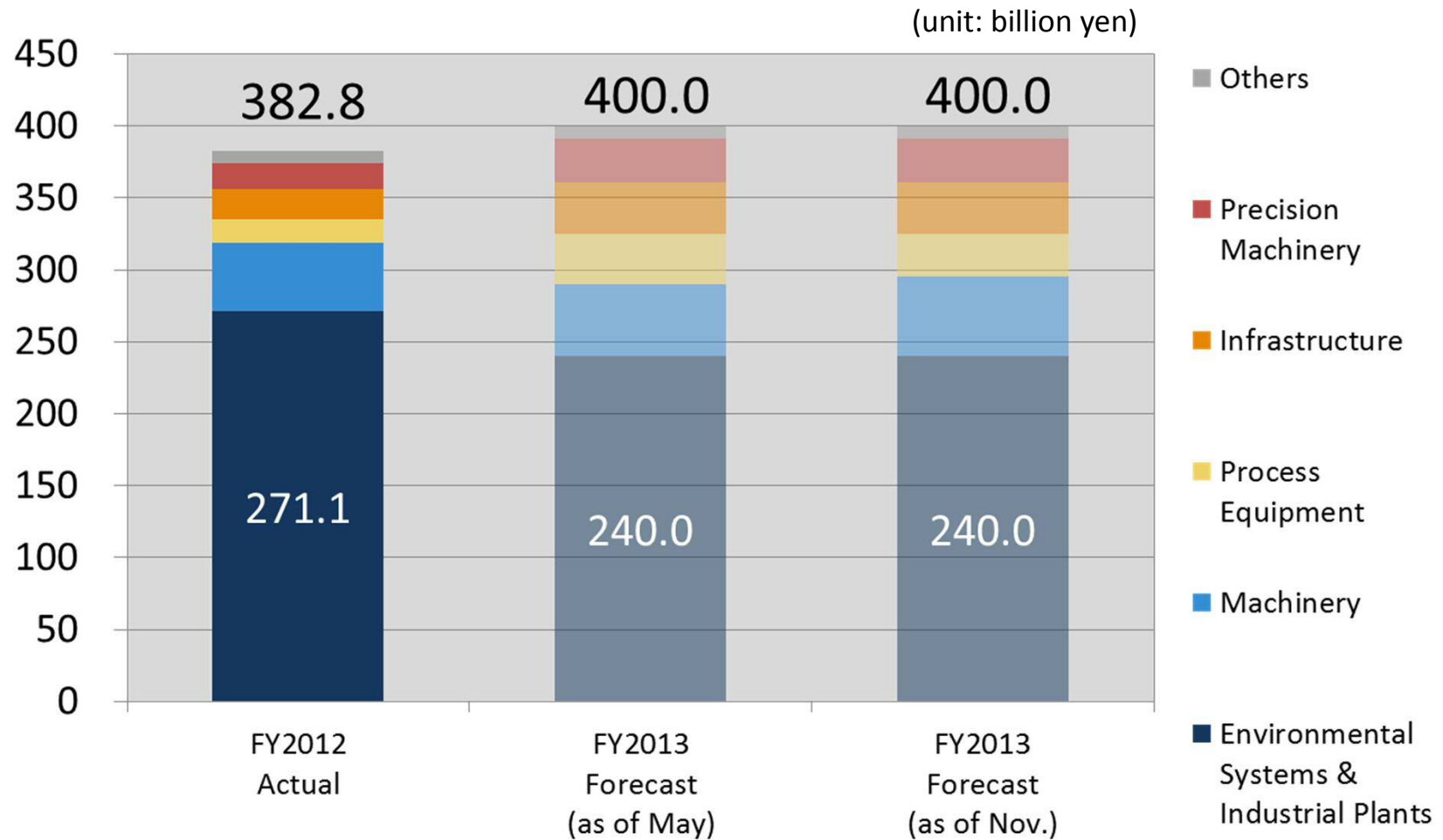
## 2. FORECAST OF FY2013

# FY2013 Forecast / Overview

(unit: billion yen)

	FY2012	FY2013 Forecast		Difference (B-A)
	Actual (A)	as of May	as of Nov. (B)	
Order intake	382.8	400.0	400.0	17.2
Net sales	296.7	320.0	320.0	23.3
Operating income	11.3	13.0	13.0	1.7
(ratio)	3.8%	4.1%	4.1%	0.3%
Ordinary income	11.2	10.0	10.0	▲1.2
(ratio)	3.8%	3.1%	3.1%	▲0.7%
Net income	7.4	7.5	7.5	0.1
(ratio)	2.5%	2.3%	2.3%	▲0.2%

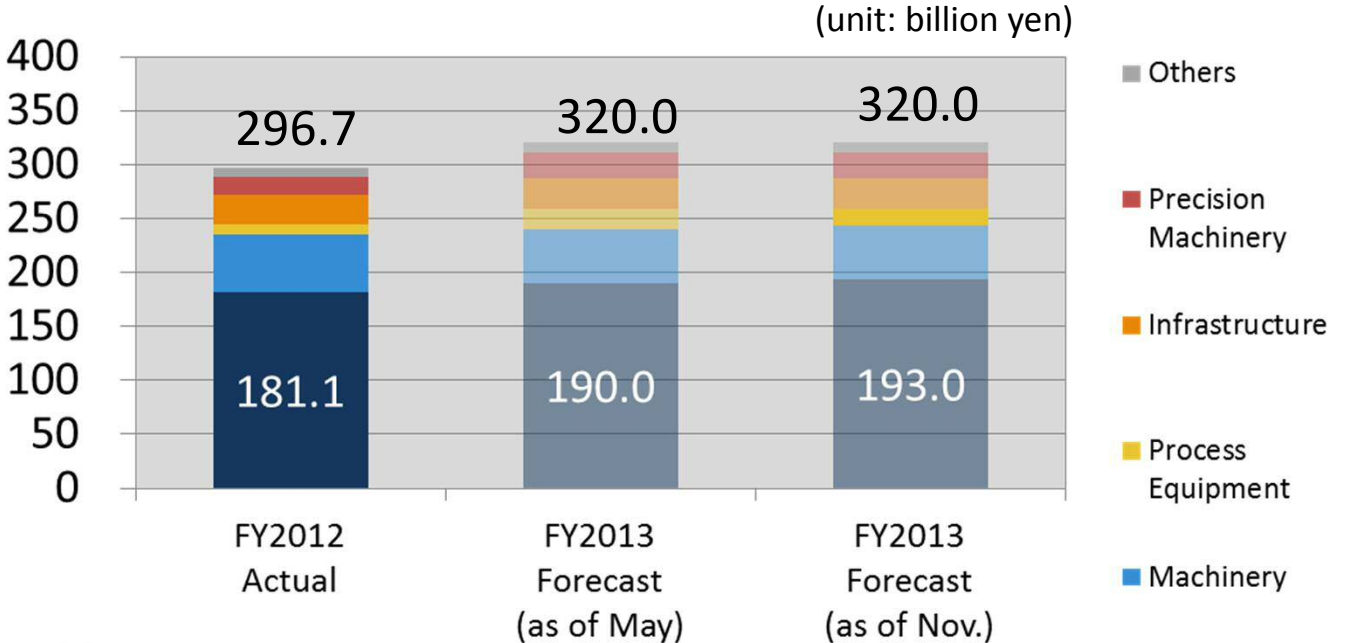
# FY2013 Forecast / Oder intake



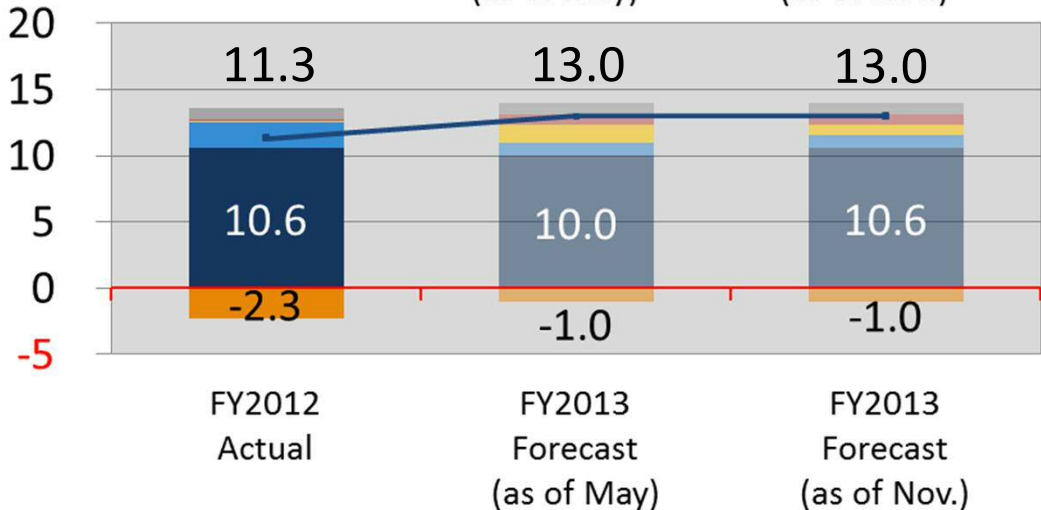
# FY2013 Forecast / Net sales & Operating income



Net sales



Operating income



# FY2013 Forecast / by segment

(unit: billion yen)

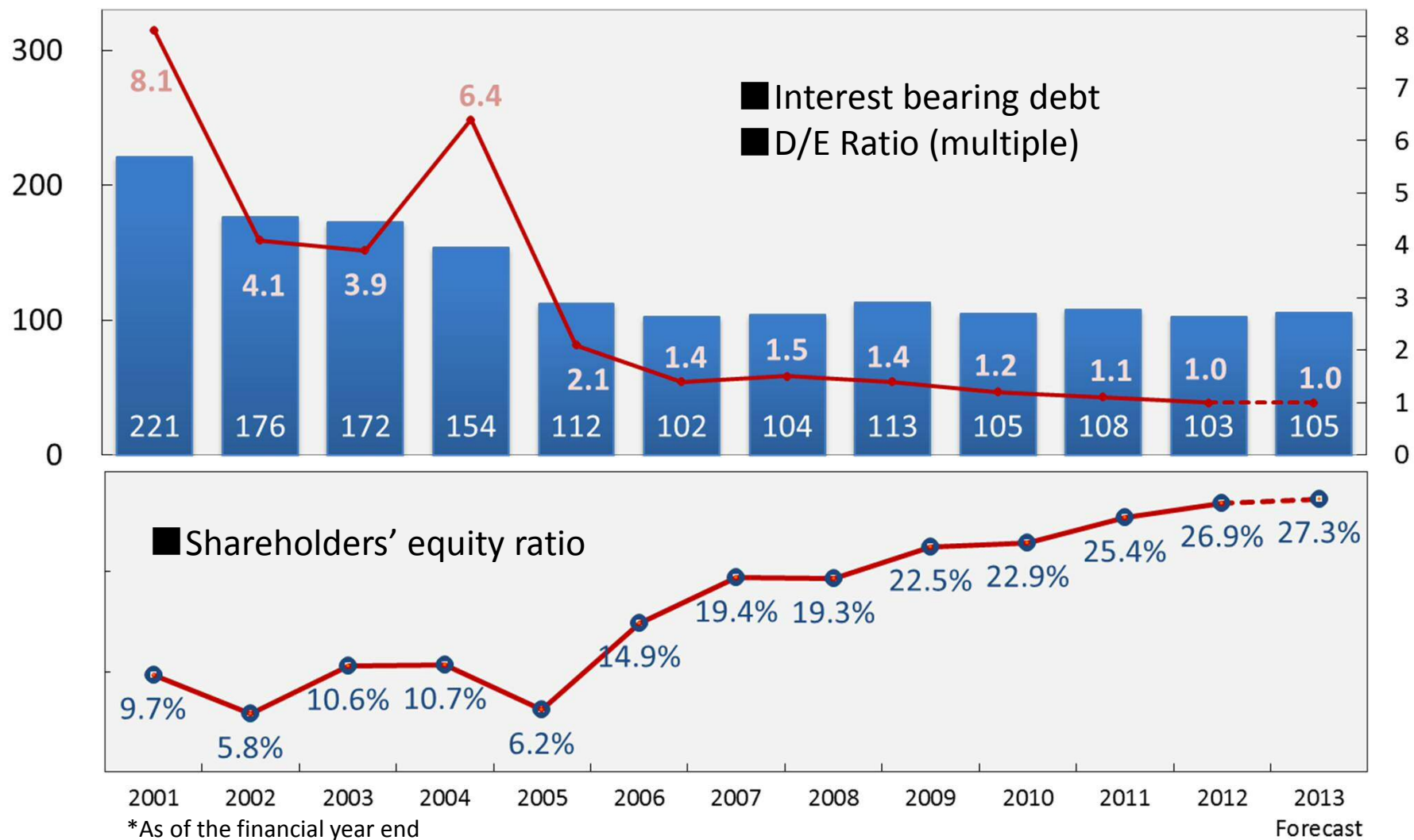
		Environmental Systems & Industrial Plants	Machinery	Process Equipment	Infra- structure	Precision Machinery	Others	Total	
<b>FY2013 Forecast</b>	<b>As of Nov.</b>	Order intake	240.0	55.0	30.0	36.0	30.0	9.0	400.0
		Net sales	193.0	50.0	16.0	28.0	24.0	9.0	320.0
		Operating income	10.6	1.0	0.7	▲1.0	0.8	0.9	13.0
	<b>As of May</b>	Order intake	240.0	50.0	35.0	36.0	30.0	9.0	400.0
		Net sales	190.0	50.0	19.0	28.0	24.0	9.0	320.0
		Operating income	10.0	1.0	1.3	▲1.0	0.8	0.9	13.0
<b>FY2012 Actual</b>	Order intake	271.1	47.5	16.3	20.9	18.3	8.7	382.8	
	Net sales	181.1	53.7	10.1	26.5	16.7	8.6	296.7	
	Operating income	10.6	1.9	0.1	▲2.3	0.1	0.9	11.3	



# FY2013 Forecast / Interest bearing debt

(unit: billion yen)

(multiple)

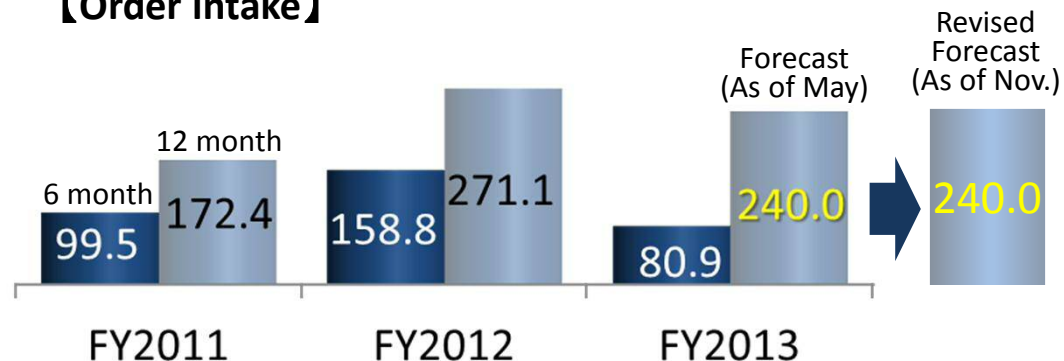


## 3. DETAILS BY SEGMENT

# Environmental Systems & Industrial Plants

## 【Order intake】

(unit: billion yen)



### Order intake

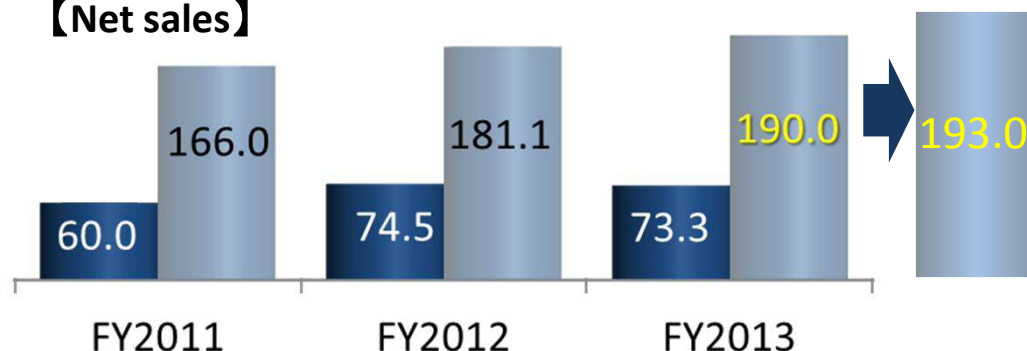
#### FY2013 Semi Annual Result -April to Sept. 2013

- Yen 80.9 (- Yen 77.9 YoY)
- Decrease of EPC and Long-term operation of Energy from Waste Plant (EfW)
- Projects concentrated in 2<sup>nd</sup> half

#### FY2013 Annual Forecast –as of November

- Yen 240.0 (unchanged from May Forecast)
- 3 large orders confirmed as of October 31 (included 1 unofficial notification)

## 【Net sales】



### Net sales/Operating income

#### FY2013 Semi Annual Result -April to Sept. 2013

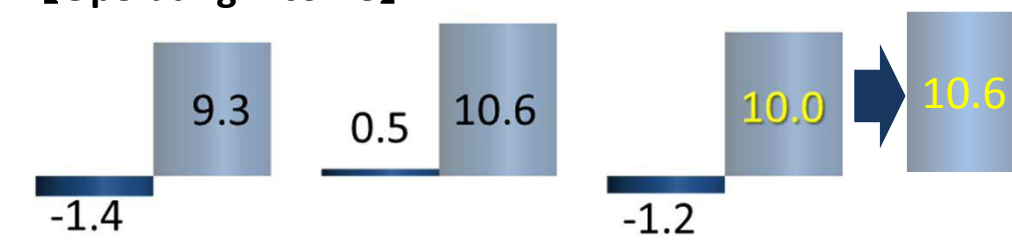
- <Net sales>
- Yen 73.3 (- Yen 1.2 YoY)
- <Operating income>
- -Yen 1.2 (- Yen 1.7 YoY)

- Decrease of profitable projects

#### FY2013 Annual Forecast –as of November

- <Net sales>
- Yen 193.0 (+ Yen 3.0 from May Forecast)
- Increase of AOM
- Sales progress as scheduled
- <Operating income>
- Yen 10.6 (+ Yen 0.6 from May Forecast)
- Increase of Net sales

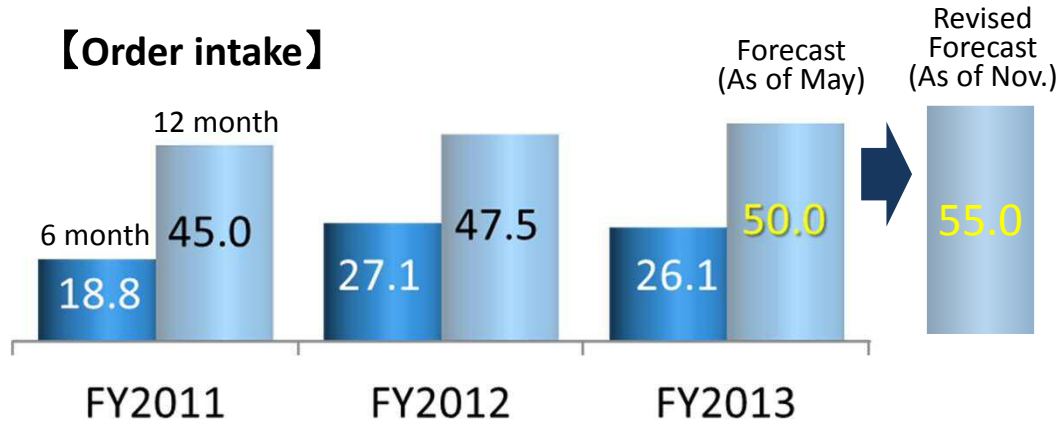
## 【Operating income】



EPC: Engineering, Procurement and Construction  
AOM: After-sales Service, Operation and Maintenance

# Machinery

(unit: billion yen)



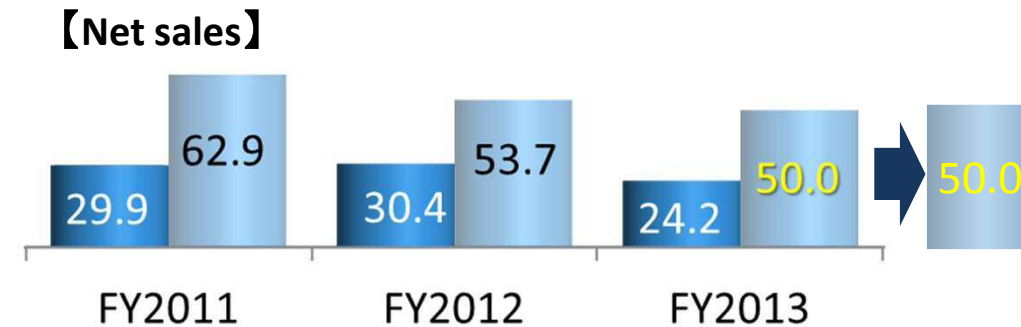
### Order intake

#### FY2013 Semi Annual Result -April to Sept. 2013

- Yen 26.1 (- Yen 1.0 YoY)

#### FY2013 Annual Forecast –as of November

- Yen 55.0 (+ Yen 5.0 from May Forecast)
- The market of Press machine for automobile industry continues to be brisk



### Net sales/Operating income

#### FY2013 Semi Annual Result -April to Sept. 2013

<Net sales>

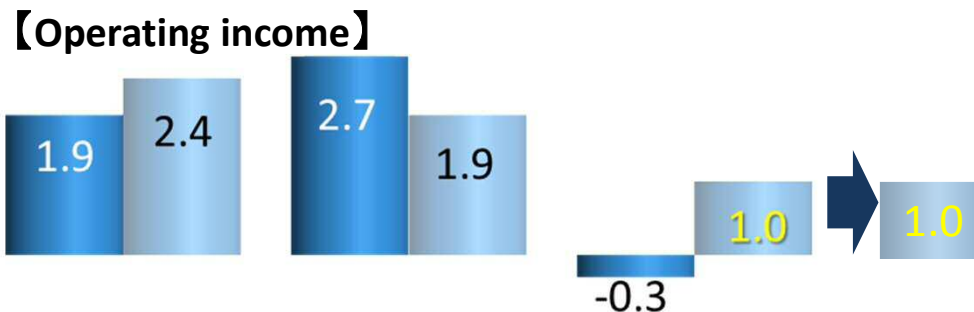
- Yen 24.2 (- Yen 6.2 YoY)
- Decrease of Marine diesel engines

<Operating income>

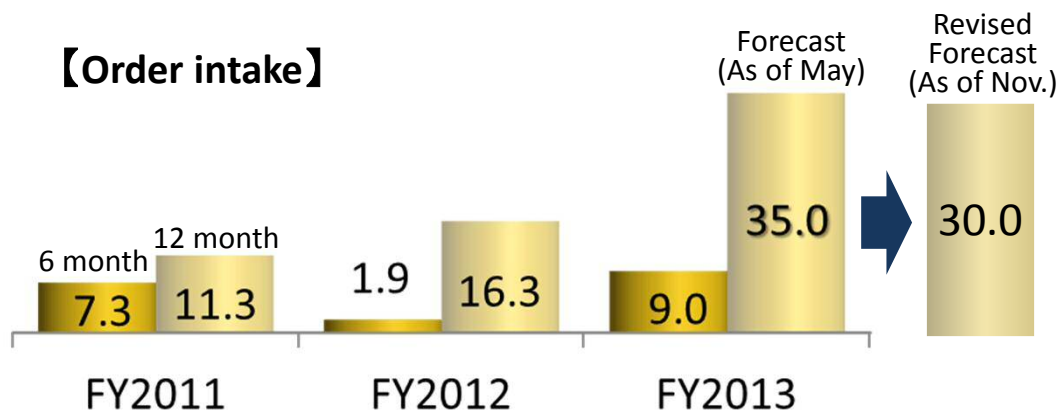
- -Yen 0.3 (- Yen 3.0 YoY)
- Decrease of Net sales and profitability of Marine diesel engines

#### FY2013 Annual Forecast –as of November

- Net sales Yen 50.0
- Operating income Yen 1.0
- Unchanged from May Forecast



# Process Equipment



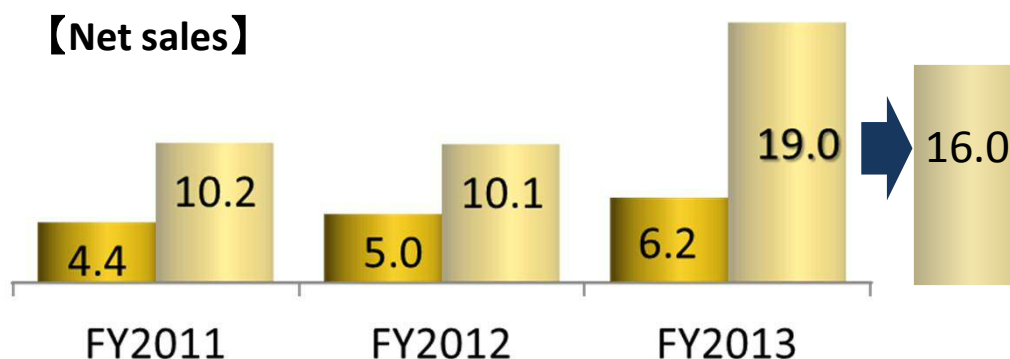
## Order intake

### FY2013 Semi Annual Result -April to Sept. 2013

- Yen 9.0 (+ Yen 7.1 YoY)
- Increase of Reactor
- Addition of NAC International

### FY2013 Annual Forecast –as of November

- Yen 30.0 (- Yen 5.0 from May Forecast)
- Delay in order intake of large GTL Reactor



## Net sales/Operating income

### FY2013 Semi Annual Result -April to Sept. 2013

- <Net sales>
- Yen 6.2 (+ Yen 1.2 YoY)
  - Increase of Reactor

- <Operating income>
- -Yen 0.5 (- Yen 0.5 YoY)

- Amortization of NAC's goodwill

### FY2013 Annual Forecast –as of November

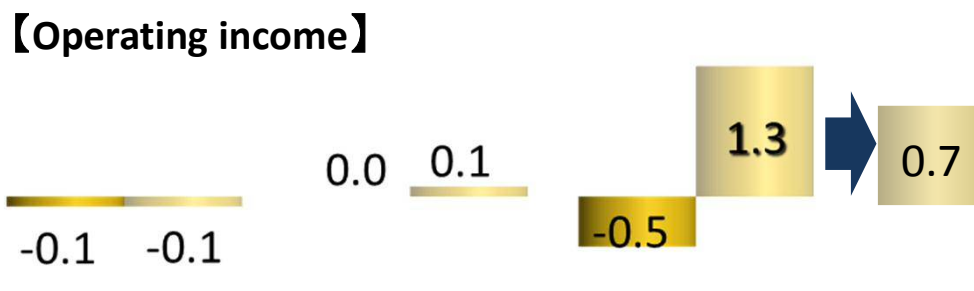
- <Net sales>
- Yen 16.0 (- Yen 3.0 from May Forecast)

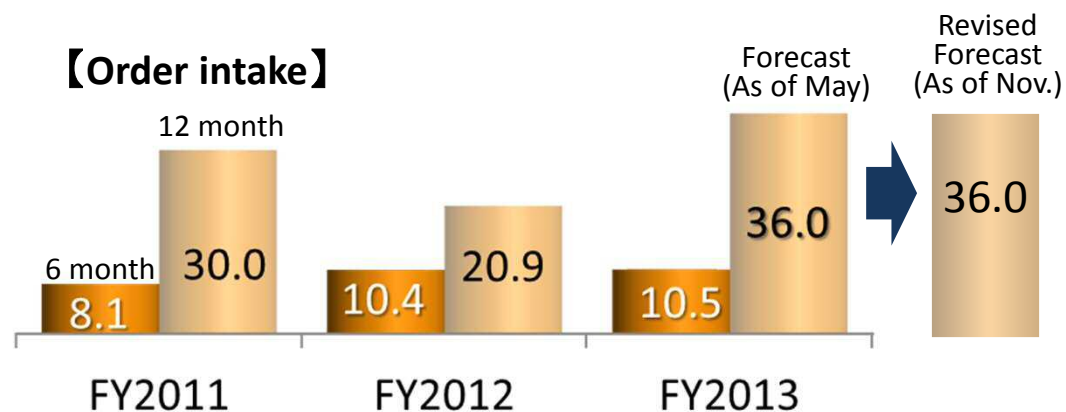
- Delay in kick off of a large GTL Reactor project

- Delay in order intake of large GTL Reactor

- <Operating income>

- Yen 0.7 (- Yen 0.6 from May Forecast)
- Decrease of Net sales





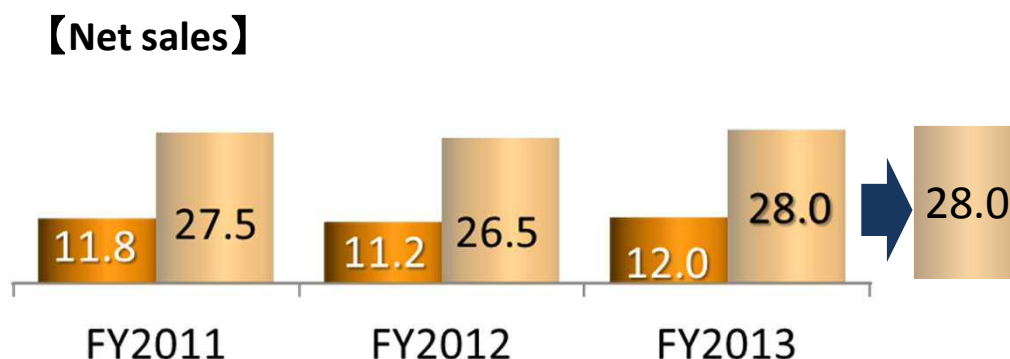
## Order intake

### FY2013 Semi Annual Result -April to Sept. 2013

- Yen 10.5 (+ Yen 0.1 YoY)

### FY2013 Annual Forecast –as of November

- Yen 36.0 (unchanged from May Forecast)
- Order of Hydraulic gates and Movable flap-gate type breakwater are expected in 2<sup>nd</sup> half



## Net sales/Operating income

### FY2013 Semi Annual Result -April to Sept. 2013

<Net sales>

- Yen 12.0 (+ Yen 0.8 YoY)
- Increase of Steel stacks and Hydraulic gates despite decrease of Shield tunneling machines

<Operating income>

- -Yen 1.2 (+ Yen 1.0 YoY)
- Improvement of profitability in Shield tunneling machines
- Increase of Net sales in Steel stacks and Hydraulic gates

### FY2013 Annual Forecast –as of November

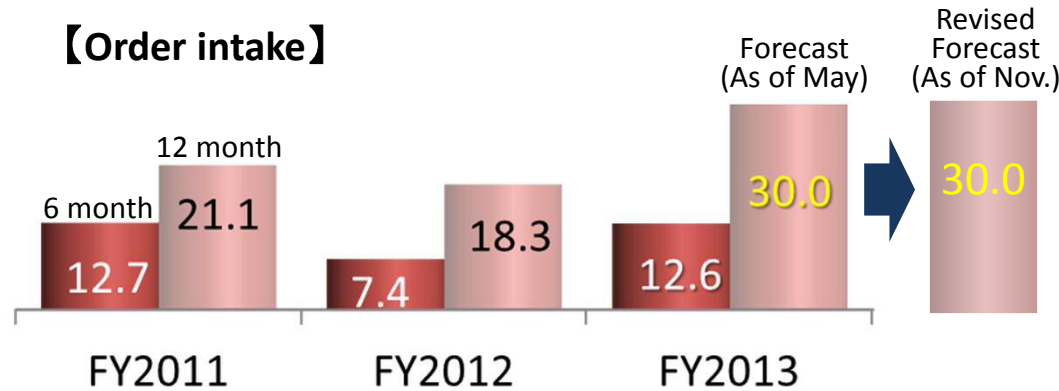
- Net sales Yen 28.0
- Operating income -Yen 1.0
- Unchanged from May Forecast



# Precision Machinery

(unit: billion yen)

## 【Order intake】



## Order intake

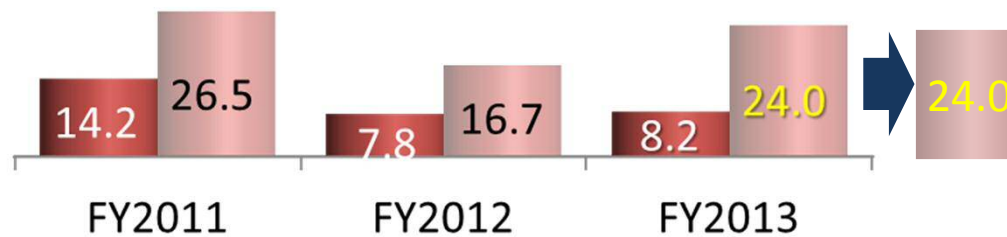
### FY2013 Semi Annual Result -April to Sept. 2013

- Yen 12.6 (+ Yen 5.2 YoY)
- Increase of food and drug filling and packaging systems and liquid crystal panel production systems

### FY2013 Annual Forecast –as of November

- Yen 30.0 (unchanged from May Forecast)

## 【Net sales】



## Net sales/Operating income

### FY2013 Semi Annual Result -April to Sept. 2013

<Net sales>

- Yen 8.2 (+ Yen 0.4 YoY)

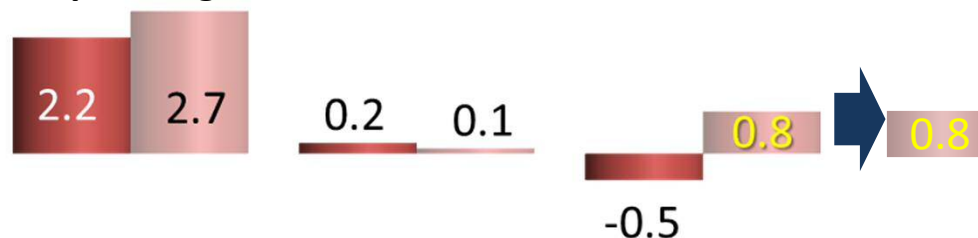
<Operating income>

- -Yen 0.5 (- Yen 0.7 YoY)
- Decline in profitability of projects

### FY2013 Annual Forecast –as of November

- Net sales Yen 24.0
- Operating income Yen 0.8
- Unchanged from May Forecast

## 【Operating income】



## **4. PROGRESS OF MID TERM BUSINESS PLAN “HITZ VISION”**



# Key Measure for Mid Term Business Plan

Innovation of Business	◆ Define Growth Area		Define Business Domain and Target Market
	◆ Strengthen the Growth Area	◆ Global Business	Newly established Global Business Promotion Division Expansion of overseas office
		◆ Proposal for Solution	Promotion of Customers' View Activities New R&D System
	◆ Improvement of Corporate Power for Earning from business		Well-balanced Business Portfolio
	◆ No. 1 Profitability in each business segments		Planning of Business Strategy and Development by PDCA
Innovation of Mgmt. Control	◆ Organization		Operation of Flat Matrix Management
	◆ Financial Position		Shareholders' equity ratio of 30% by FY 2013 Further improvement of credit rating
	◆ R&D to Future Business		New R&D Organization (Business & Product Development HQ) Joint Work with Business Planning Dept. and Business & Product Development HQ
	◆ Transform Corporate Culture		Secure Aggressive, Growth Driven, Efficiency-driven culture Promote Proactive Staff

# Progress of Mid Term Business Plan

## 1. Green Energy

EfW Global Business  
Renewable Energy Project

## 2. Social Infrastructure and Disaster Prevention

Process Equipment – Expansion of Overseas manufacturing site

## 3. Development of Global Business

Establishment of local Subsidiary in Myanmar  
Rebranding and Relocation of Vietnam Subsidiary

## 4. Research & Development

Hitz Dehydration System HDS® by Zeolite Membrane Element  
Demonstration Plant for Solar Thermal Power Generation  
High-Speed Seabed Infiltration System

## 5. Hitz Vision Objectives

# 1. Green Energy (1)

## EfW Global Business (Energy from Waste)

EfW and Incineration Plants -Order intake from April to October, 2013-

### Japan

EPC		Long term operation & maintenance
EPC: Engineering, Procurement and Construction		
1. Kyoto City(*)	EfW Plant: 250t/d × 2, 14MW Bio gasification plant: 30t/d × 2, 1MW	1. Kurashiki-City, Okayama: 21 year contract
Retrofit		
1. Kurashiki City, Okayama	EfW Plant: 150t/d × 2 Power generation 1.9MW →3.4MW	2. Greater Tamura, Fukushima: 8 year contract
2. Greater Katori, Chiba	Incineration Plant: 45t/16h × 3	

### Overseas

EPC	
1. Buckinghamshire UK by HZ Inova (*)	EfW Plant: 900t/d, 22MW
2. UK Project by HZ Inova (*) (unofficial notification)	EfW Plant: 1,162t/d



(\*) Order intake in 3Q

# 1. Green Energy (2)

## Renewable Energy Project under Feed in Tariff

### ■ Mega Solar Power Plant

- **1.5MW plant built in our Innoshima works**

Started operation in September 2013 under 20 year power supply contract  
Electric power generation of approx. 1,718,000 kWh per year



- **1.0MW plant to be completed for our affiliated company**

Start operation from Dec 2013 under 20 year contract  
Electric power generation of approx. 1,317,000 kWh per year

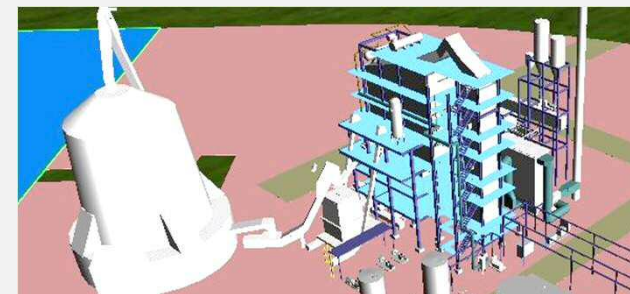
- **Enter into the EPC and AOM business of Mega Solar**

### ■ Biomass Power Plant

- **5.8MW Plant fueled by unused woodchips**

Plant completion in March 2015  
and 20-year operation

EPC: Engineering, Procurement and Construction  
AOM: After-sales Service, Operation and Maintenance



## 2. Social Infrastructure and Disaster Prevention

### Process Equipment – Expansion of Overseas manufacturing site

#### ■ Completion of **Chinese JV**'s manufacturing site



**Nagaoka Hitachi Zosen  
Equipment (Dalian) Co., Ltd**  
Manufacturing of Process Equipment  
and Water Treatment Facility

#### ■ Additional investment to **Indian JV** for production facility

##### **ISGEC Hitachi Zosen Ltd**

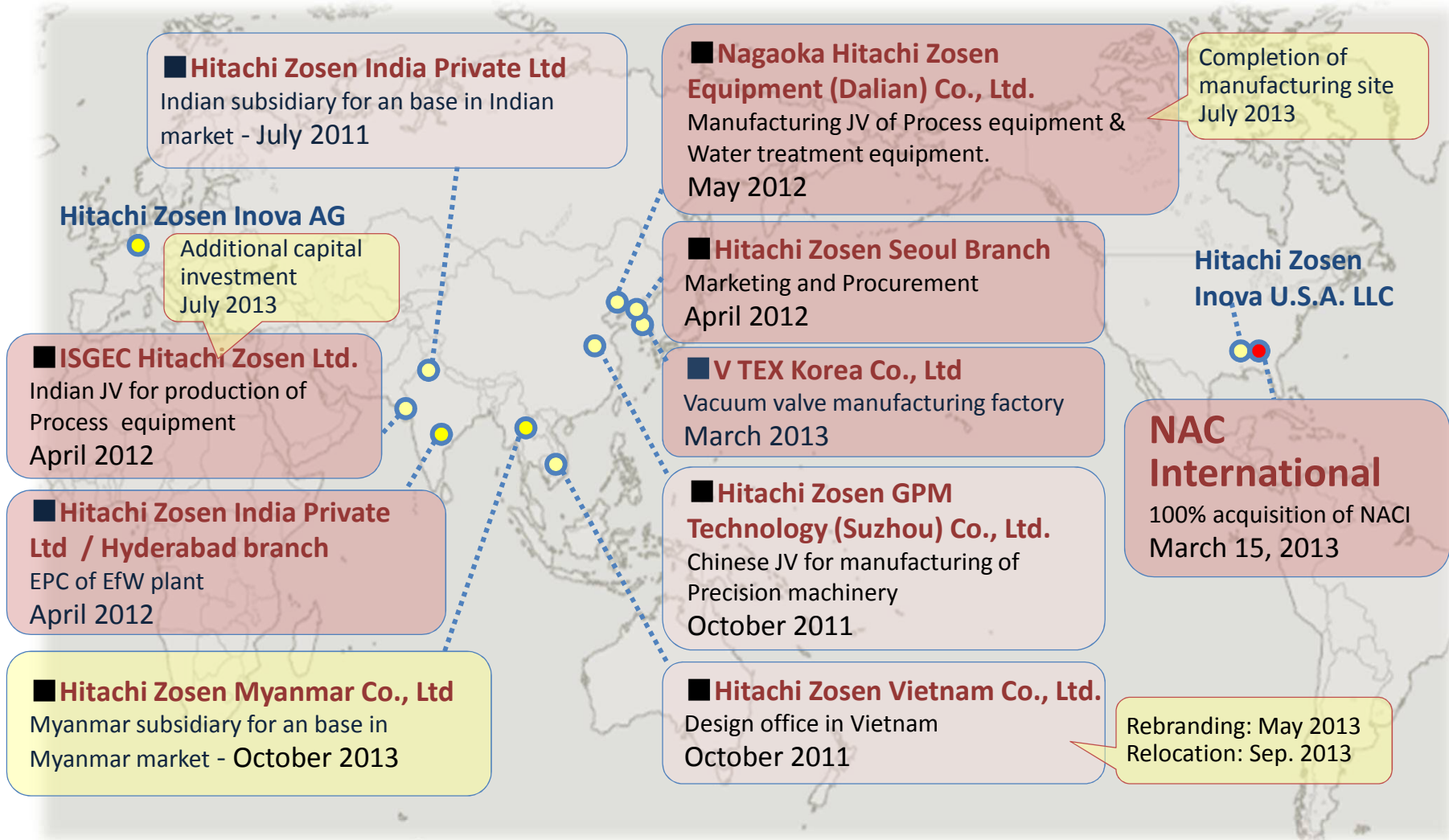
- Increase of production capacity:  
8,000t to 13,000t (× 1.6)
- Completion: June 2014



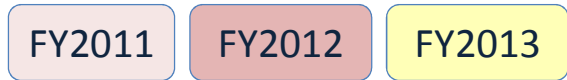
Manufacturing Site



# 3. Development of Global Business (1)



■ Action implemented in medium term business plan starting 2011 until September 30, 2013



# 3. Development of Global Business (2)

## Myanmar Subsidiary

### Hitachi Zosen Myanmar Co., Ltd

Started sales activities of infrastructure business



## Vietnam Subsidiary

### Hitachi Zosen Vietnam Co., Ltd.

Rebranding and relocation to new office to enhance the role of engineering hub in Southeast Asia



## 4. Research & Development (1)

### Hitz Dehydration System HDS® by Zeolite Membrane Element

#### ■ Field Test in distillation process of petrochemical plant

Accomplishment of continuous running for 200 hours

HDS®

- Improvement of water resistance
- Lengthening of body
- Possibility of saving more than 50% energy

#### NEDO Project Participations

Waseda University  
JX Nippon Oil & Energy Corp.  
Hitachi Zosen Corp.  
Mitsubishi Chemical Corp.  
Chiyoda Corp.  
Noritake Co., Ltd



#### ■ Starting the Development for Mass Production

Facility to produce 1,500 per month of large-sized membrane  
(diameter: 25mm, length: 1.7m)  
for Dehydration of bioethanol and various solvent



## 4. Research & Development (2)

### Demonstration Plant for Solar Thermal Power Generation

#### ■ Saudi Arabia

#### Thermal Power Generation ⇒ Contributing to Desalination plants

Using mirror reflectors to focus sunlight on a tube absorber,  
which acts as a heat source to generate steam and produce electricity  
Thermal storage enable continuous power generation during nighttime

#### Hitz Super Low Profile Fresnel concentrated solar power

- (1) Controllable reflector in both angle and curvature  
→ improvement of the solar concentration ratio
- (2) Lower setup of the tube absorber → wind resistance and easy maintenance



# 4. Research & Development (3)

## High-speed Seabed Infiltration System (HiSIS®)

### ■ Abu Dhabi

#### HiSIS® pilot plant construction

is agreed between the Abu Dhabi Water and Electricity Authority (ADWEA) and Hitachi Zosen contributing to **Seawater Reverse Osmosis (SWRO) Desalination Plants**

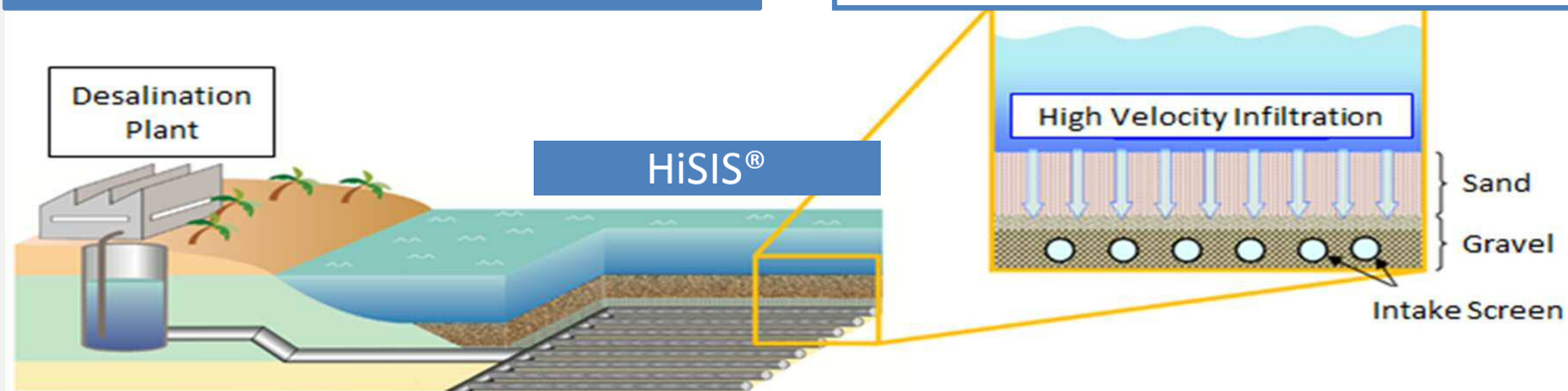
#### Features of SWRO

Needs fewer electricity consumption, but has problems;

- clogging of membrane
- environmental burden caused by injecting chemicals

#### Merits of installing HiSIS® to SWRO

- (1) Saving facilities  
→ Reduction of initial costs
- (2) Restraint the growth of marine life, amount of injecting chemicals, and deterioration of membrane  
→ Reduction of running costs and environmental burden



# 5. Hitz Vision Objectives

(unit: billion Yen)

	FY2011			FY2012			FY2013	
	Hitz-V Plan	Actual	Achievement ratio	Hitz-V Plan	Actual	Achievement ratio	Hitz-V Plan	Forecast
Order intake	370.0	289.7	78.3%	440.0	382.8	87.0%	500.0	400.0
Net sales	310.0	303.0	97.7%	340.0	296.7	87.3%	400.0	320.0
Operating income (Ratio)	14.0 (4.5%)	11.3 (3.7%)	80.7%	15.5 (4.6%)	11.3 (3.8%)	72.9%	20.0 (5.0%)	13.0 (4.1%)
Ordinary income (Ratio)	13.0 (4.2%)	10.7 (3.5%)	82.3%	13.5 (4.0%)	11.2 (3.8%)	82.3%	16.0 (4.0%)	10.0 (3.1%)
Net income	10.0	9.3	93.0%	10.5	7.4	71.5%	11.5	7.5
Int. bearing debt	114.4	107.6	—	100.0	102.6	—	100.0	105.0
Net worth ratio	24.2%	25.4%	—	29.1%	26.9%	—	30.0%	27.3%



# Hitachi Zosen

## **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.