## Hitachi Zosen Corporation

# Financial Results 2<sup>nd</sup> Quarter FY2016



November 2016 Hitachi Zosen Corporation

## **Overview of P&L**

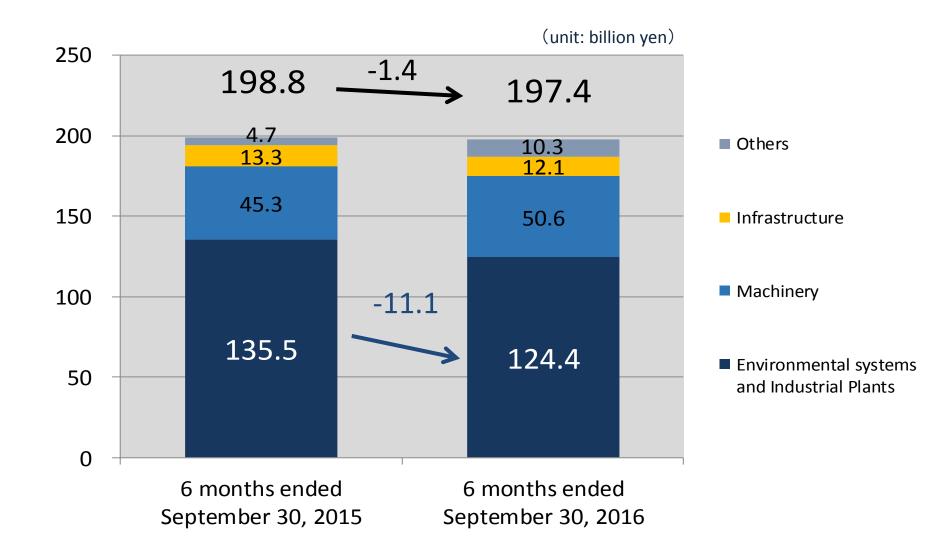


(Unit: billion yen)

	(Cine Simen jen,					
	6months ended September 30,2015	6months ended September 30,2016	Difference			
Order intake	198.8	197.4	-1.4			
Net Sales	158.1	171.1	13.0			
Operating income	-0.4	-0.2	0.2			
(Ratio)	-0.3%	-0.1%	0.2%			
Ordinary income	-1.2	-0.8	0.4			
(Ratio)	-0.8%	-0.5%	0.3%			
Net income	-3.9	-2.0	1.9			
(Ratio)	-2.5%	-1.2%	1.3%			

## Order intake by segments



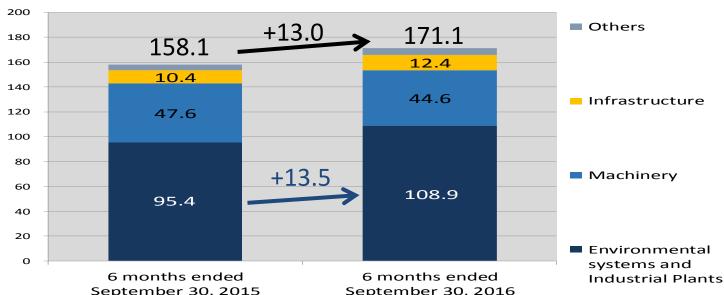


## **Net sales & Operating income**

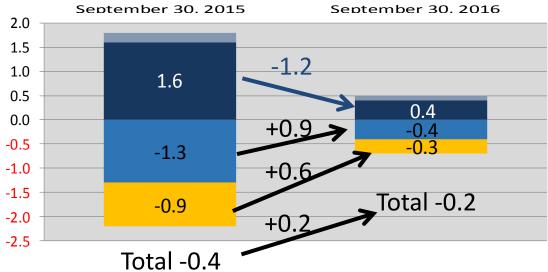


(unit: billion Yen)





■ Operating income



## **P&L** by Segments



(unit: billion Yen)

						unit: billion Yen)
		Environmental Systems and Industrial Plants	Machinery	Infrastructure	Others	Total
<b>2</b> Q	Order intake	124.4	50.6	12.1	10.3	197.4
FY2016	Net Sales	108.9	44.6	12.4	5.2	171.1
(6 months)	Operating income	0.4	-0.4	-0.3	0.1	-0.2
2Q	Order intake	135.5	45.3	13.3	4.7	198.8
FY2015	Net Sales	95.4	47.6	10.4	4.7	158.1
(6 months)	Operating income	1.6	-1.3	-0.9	0.2	-0.4
	Order intake	-11.1	5.3	-1.2	5.6	-1.4
Difference	Net Sales	13.5	-3.0	2.0	0.5	13.0
	Operating income	-1.2	0.9	0.6	-0.1	0.2





#### **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.



Ras Abu Fontas A2 Desalination Plant Qatar

## Hitachi Zosen Corporation

FY2015 Financial Results and Progress of Mid-term Business Plan (2014-2016)



November 2016 Hitachi Zosen Corporation

#### **Contents**



- Overview of FY2015 Financial Results and Forecast of FY2016
- 2. Progress of Mid-term Business Plan
- 3. Key Business Strategies
- 4. New Businesses and Products



# 1. Overview of FY2015 Financial Results and Forecast of FY2016

### **FY2015** Results and **FY2016** Forecast Overview



	FY2014	FY2015	FY2016	
	Actual	Actual	Forecast	
Order intake	452.7	435.4	450.0	
Net sales	359.3	387.0	400.0	
Operating income	12.8	15.1	16.0	
(ratio)	3.6%	3.9%	4.0%	
Non-operating P&L	-5.3	-2.9	-4.0	
Ordinary income	7.5	12.2	12.0	
(ratio)	2.1%	3.2%	3.0%	
Extraordinary P&L	1.8	-3.2	0.2	
Income tax & Non-ctrl interests	-4.2	-3.2	-6.2	
Net income	5.1	5.8	6.0	
(ratio)	1.4%	1.5%	1.5%	

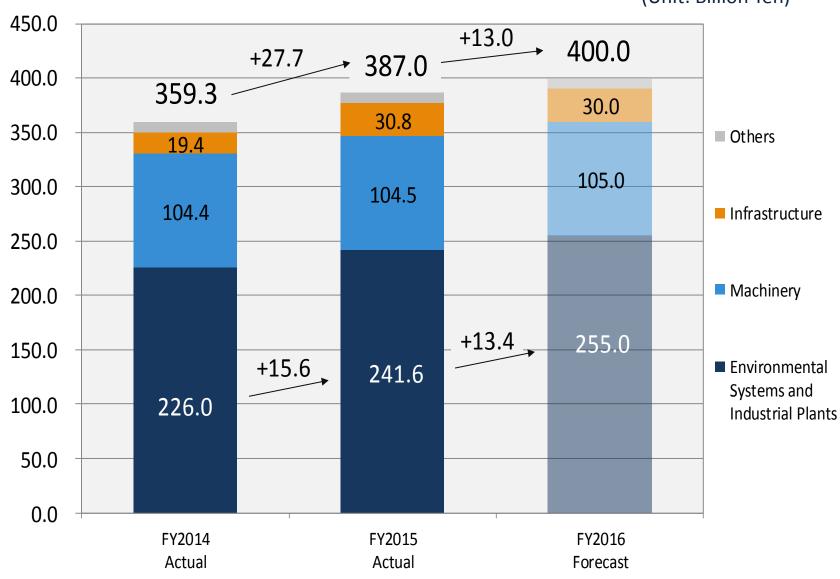
#### **Order intake**





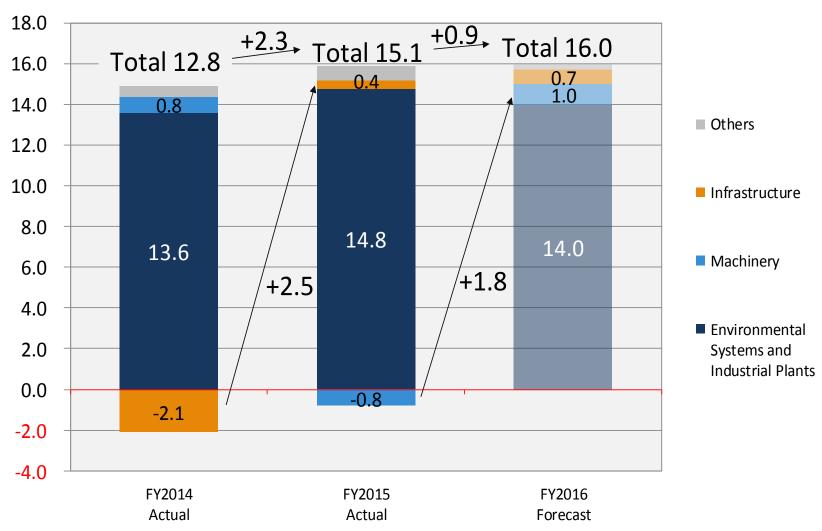
#### **Net sales**





## **Operating income**





## by Segments



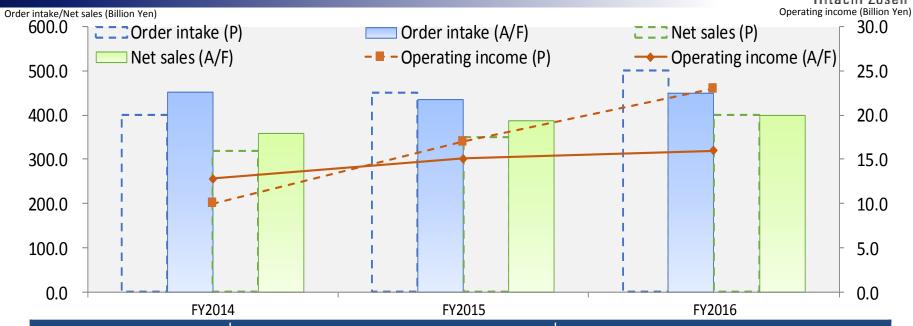
					(OTHE: BII	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
		Environmental Systems & Industrial Plants	Machinery	Infrastructure	Others	Total
	Order intake	315.0	100.6	27.7	9.4	452.7
FY2014 Actual	Net sales	226.0	104.4	19.4	9.5	359.3
	Operating income	13.6	0.8	-2.1	0.5	12.8
	Order intake	283.7	107.2	34.5	10.0	435.4
FY2015 Actual	Net sales	241.6	104.5	30.8	10.1	387.0
	Operating income	14.8	-0.8	0.4	0.7	15.1
	Order intake	300.0	105.0	30.0	15.0	450.0
FY2016 Forecast	Net sales	255.0	105.0	30.0	10.0	400.0
	Operating income	14.0	1.0	0.7	0.3	16.0



## 2. Progress of Mid-term Business Plan

## Management targets (1)





	Mid-term Business Plan			Management targets (Actual / Forecast)		
	FY2014	FY2015	FY2016	FY2014	FY2015	FY2016
Order intake	400.0	450.0	500.0	452.7	435.4	450.0
Net sales	320.0	350.0	400.0	359.3	387.0	400.0
Operating income	10.0	17.0	23.0	12.8	15.1	16.0
Ordinary income	8.0	14.0	20.0	7.5	12.2	12.0
Net income	4.0	8.0	13.0	5.1	5.8	6.0

## Management targets (2)



## **♦** Status of Well-balanced Business Portfolio

Hitachi Zosen (Unit: Billion yen)

	FY2010		FY20	14	FY2015	
Domestic	237.5	83%	237.1	66%	258.1	67%
Overseas	49.6	17%	122.2	34%	128.9	33%
Total	287.1	100%	359.3	100%	387.0	100%
New Businesses/Products	_	_	3.2	1%	11.5	3%
Stable Businesses (After-Sales Service, etc.)	115.5	40%	136.1	38%	148.5	38%

#### Hitz Vision I

[Overseas]

17% (FY2010)  $\rightarrow$  30% (FY2016)

[Stable Businesses]

40% (FY2010)  $\rightarrow$  50% (FY2016)

[New Businesses/Products] 50Bn (FY2016)

## Management targets (3)



#### **♦** Investment

	Mid-term Business plan (FY2014-2016 total)
R&D expenses	30.0
Capital investment	30.0
M&A & others	40.0
Total	100.0



## 3. Key Business Strategies

#### **EfW Reference**



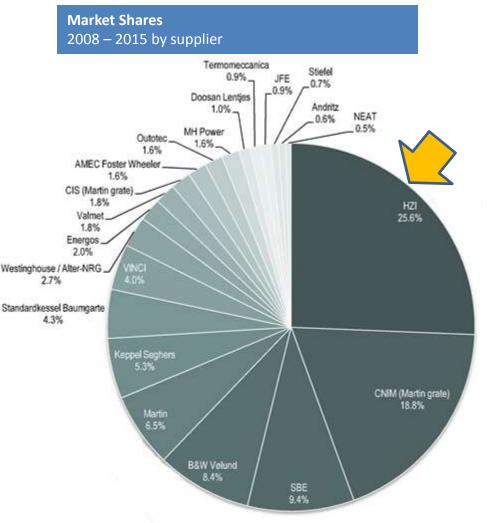
## **♦** World-class ample reference projects



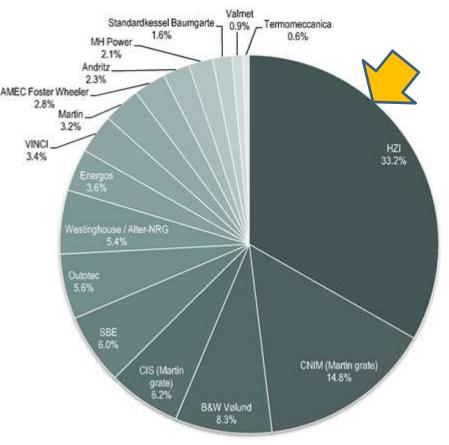
## **EfW Market Shares - Europe-**



## Hitachi Zosen Inova (HZI) Market Shares



Market Shares 2013 – 2015 by supplier



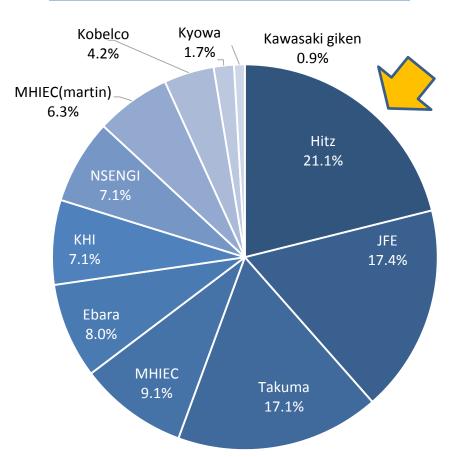
Total: 70'004 tpd Total: 19'839 tpd

## **EfW Market Shares -Japan-**



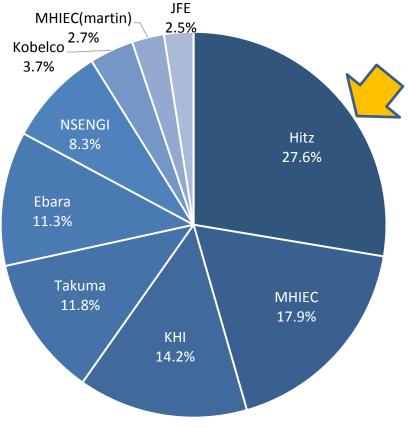
## **♦** Hitz Market Shares





Total: 22'719 tpd

#### Market Shares 2013 – 2015 by supplier

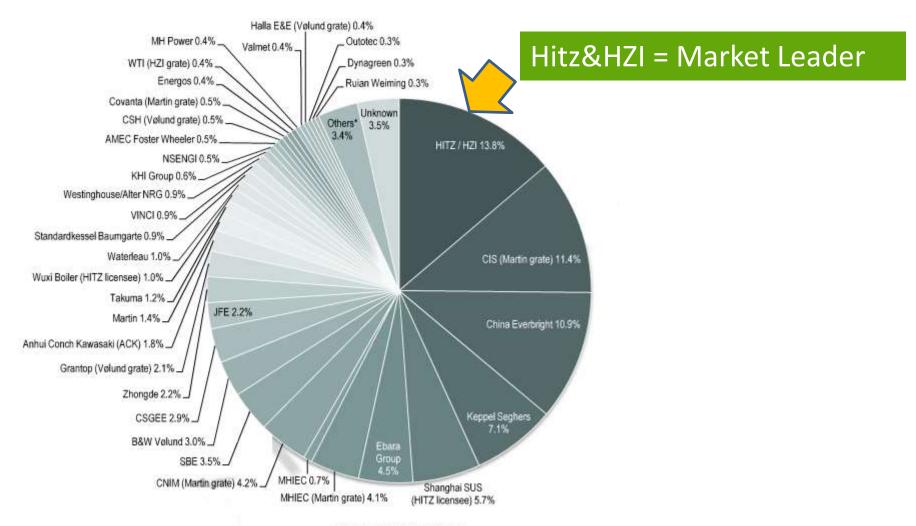


Total: 8'926 tpd

#### **EfW Market Shares - Worldwide-**



#### Hitz&HZI Market Shares 2008-2015 – Worldwide



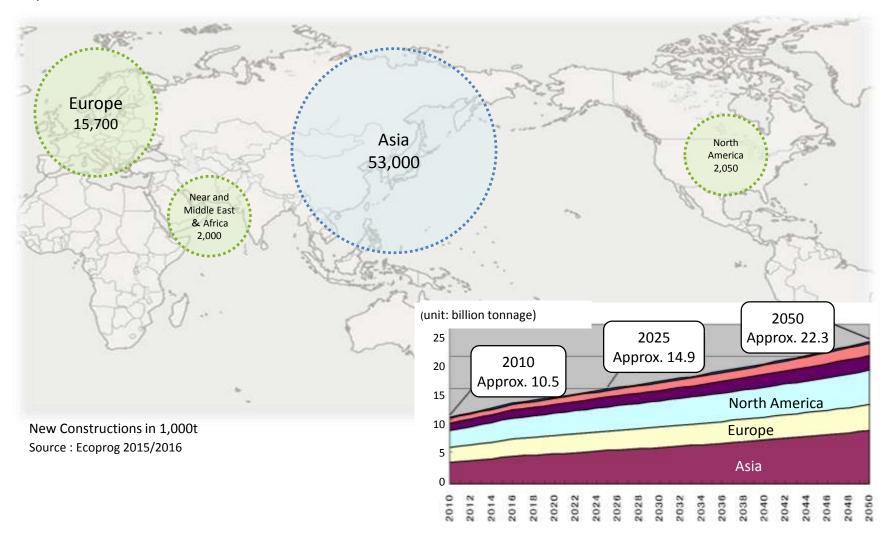
Total: 316'238 tpd

Source: Vaccani Worldwide Market Share Analysis of Thermal Waste Treatment Plants, 2016 Edition

#### **EfW Market Volume**



#### **♦** Global forecast market volume in EfW 2016-2020

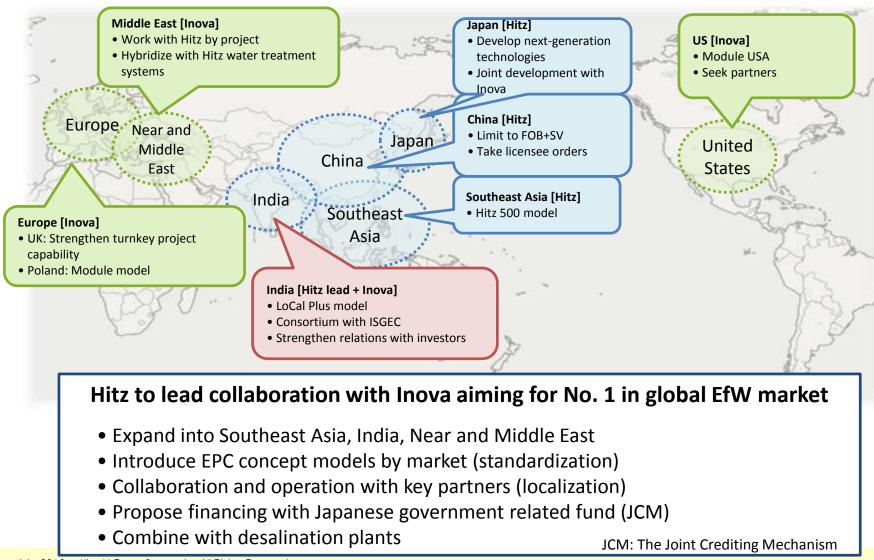


Source: "Estimates and Projections of Global Waste Emission Volumes," Research Institute of Solid Waste Management Engineering

## **EfW Strategies**



## ◆ Strategies to be No. 1 in global EfW market



## **EfW Strategies - Europe-**



## **♦** Strategic M&A of overseas companies

#### Hitachi Zosen Inova (Switzerland): since Dec. 2010

Consolidation of licensor → Aiming global Market

Steady order intake in Europe

Cleveland STV4+5: 456t/dx2 24MW (FY2011) (UK)

• Vantaa: 480t/dx2 (FY2011) (Finland)

• Ferrybridge: 1,013t/dx2 68MW (FY2012) (UK)

• Luzern: 300t/dx2 (FY2012) (Switzerland)

Buckinghamshire: 900t/dx1 22MW (FY2013) (UK)
 Severnside: 581t/dx2 34MW (FY2013) (UK)

• Poznan: 360t/dx2 15MW (FY2014) (Poland)

• Hereford & Worcestershire:

624t/dx1 21MW (FY2014) (UK)

• Dublin: 840t/dx2 69MW (FY2014) (Ireland)

• Ferrybridge2: 1,015t/dx2 14MW (FY2016) (UK)

• Edinburgh 750t/dx4 70MW (FY2016) (UK)

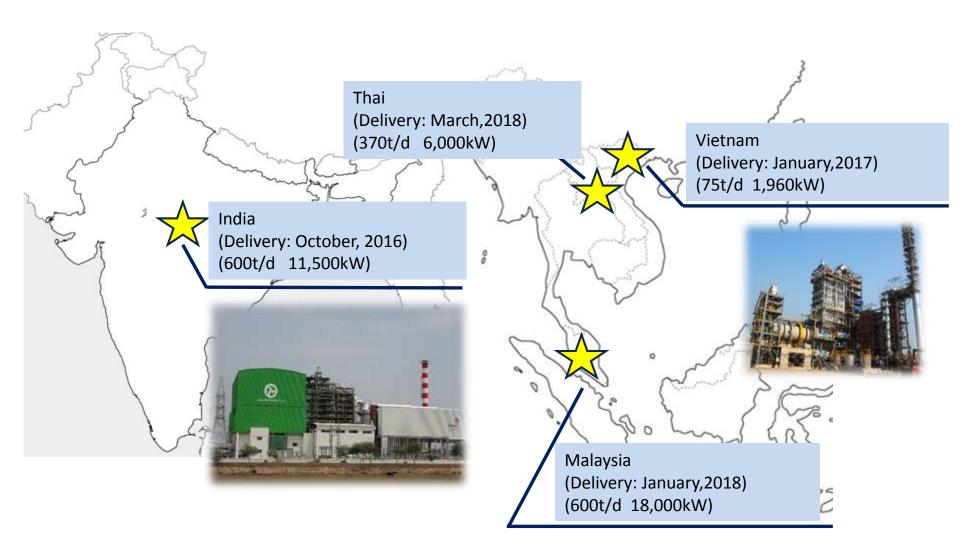


#### Accelerate synergy with Hitachi Zosen

## **EfW Strategies -Southeast and South Asia**



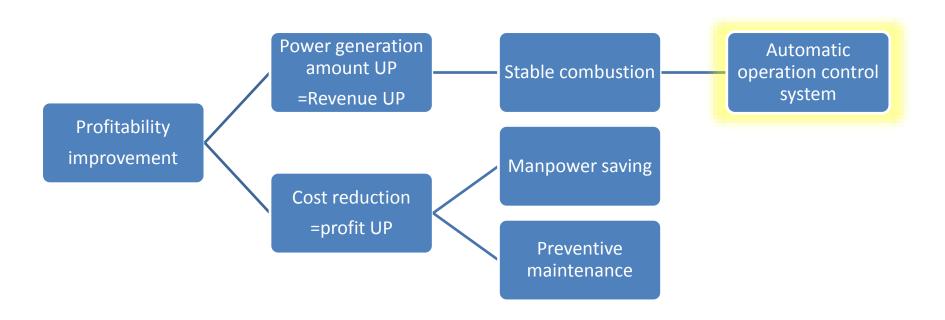
#### **◆** Reference in Southeast and South Asia



#### EfW R&D



## **◆** Rationalization by ICT

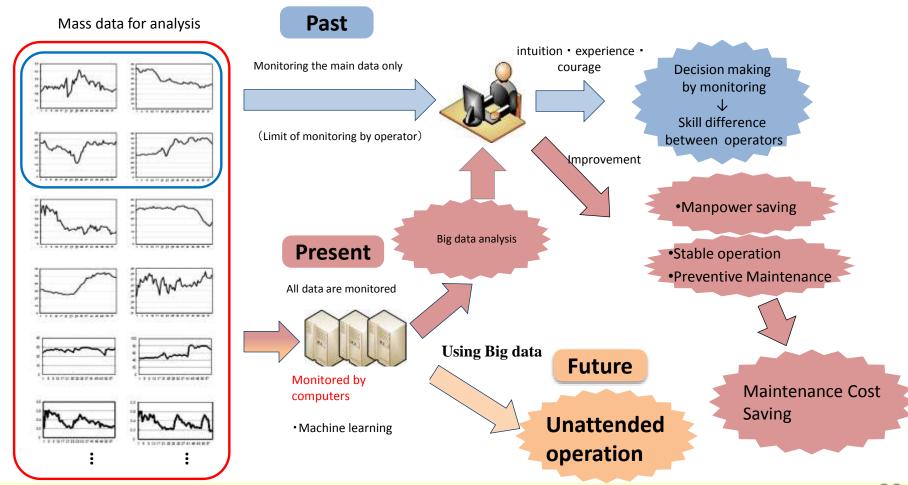


#### EfW R&D



## **♦** Rationalization by ICT

- In 2014, Hitz started a study of big data utilization with IBM
- The amount of data from EfW plants is the industry's top level



#### EfW R&D



## Rationalization by ICT

#### → Remote operation system

Plant operations are monitored remotely at support center



Malaysia (1<sup>st</sup> order) (600t/d, 18,000kW)

#### **Remote Monitoring**



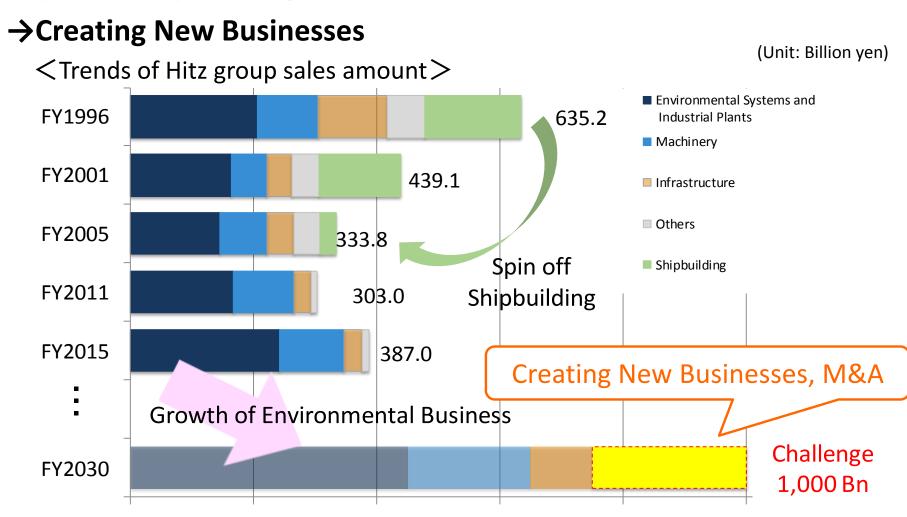


Remote Monitoring / Operation Support Center (Hitz Head office , Osaka, Japan)





◆ Spin off Shipbuilding → Growth of Environmental Business



600

800

1,000

O

200

400



# Wind Power Business Promotion Office



Onshore wind power generation



Offshore wind power generation

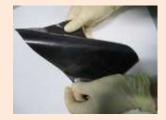
Functional Materials
Business Promotion Office



All-solid state lithium-ion batteries



Eucommia elastomer



Carbon nanotubes

# Global Environment Protecting Technology Development & Business Promotion Office



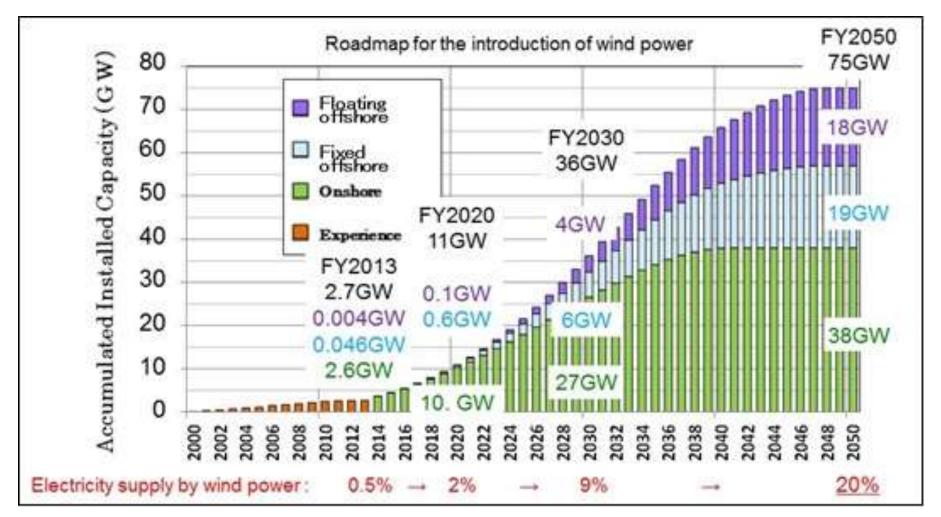
Hydrogen production system



Methanation system



## Forecast for the introduction of wind power in Japan





#### **♦** Wind Power Business

#### In operation

Kitanozawa Cliff Wind Farm 12MW (14% equity)

No.1 Omonogawa Wind Power Station 2,000kW

No.2 Omonogawa Wind Power Station 2,000kW

#### **Planning Projects**

Iwaki Katte Wind Power Station 2,000kW

Matsugasaki Wind Power Station 2,000kW

Mutsu Ogawara Wind Power Station 57,000kW

Kitakyusyu Floating Wind Turbine for NEDO Demonstration Research

NEDO: New Energy and Industrial Technology Development Organization





Effectively utilizing surplus energy, CCR (Carbon Capture and Reuse)

cooperation

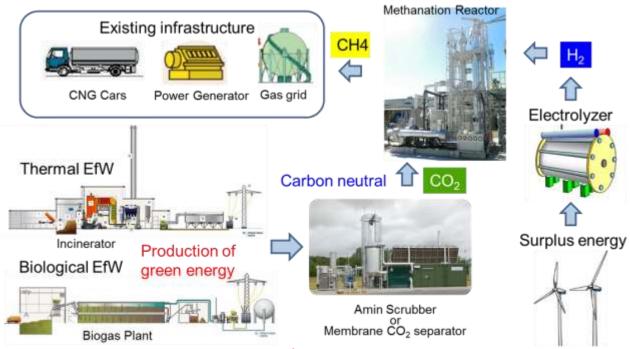
## Hitz

- Electrolyzer
- Membrane CO2 separator
- Methenation catalysts

### HZI

- Gas upgrading technology (HZI BioMethan, 2015.3)
- PtG(HZI Etogas, 2016.10)

PtG: Power to Gas



Existing Our Business Future Our Business





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