



FY2017

Business Results for the Six Months of the Fiscal Year Ending March 31, 2018

November 15, 2017

The Japan Steel Works, LTD.
Naotaka Miyauchi, Representative Director & President



JSW

JSW ARE

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【Cautionary Note】

The performance forecasts and other forward-looking statements included in this report are based on the information that was available to The Japan Steel Works, LTD. (the "Company") and certain assumptions deemed to be reasonable at the time this report was prepared, and the actual results may differ significantly from these forecasts due to a variety of reasons.

Unless otherwise noted, "previous forecast values" are those released on May 19, 2017.



JSW ARE

Evolution of The Japan Steel Works, LTD.





We will continue to do all in our power to meet our stakeholders' expectations, aiming to achieve stable growth as a company through "monozukuri" and value creation. In so doing, we remain committed to performing our obligations on four different fronts, ensuring satisfaction for customers, employees, and shareholders, as well as fulfillment of our responsibilities to society.

Representative Director & President

宮内 直孝

NAOTAKA MIYAUCHI

Birth : January 30,1958

Education : Chuo University, Faculty of Science and Engineering

Experience :

April,1981 : Entered the Japan Steel Works, LTD.

April,2011 : Deputy General Plant Manager, Hiroshima plant

April,2013 : Executive Officer,
General Plant Manager, Hiroshima Plant

April,2015 : Managing Executive Officer
Deputy Director of Machinery Business Division
(Chief of Machinery Business Unit)

April,2016 : In charge of Ordnance Business Headquarters
Director of Machinery Business Division

June,2016 : Director Managing Executive Officer

April,2017 : Representative Director & President (Present)

【Corporate Vision】

(the ideal image of a corporation to which to aspire)

A company that creates changes with creative technology,
and contributes to the development of society

We aim to be a “Change-Creating Company” that contributes to the development of society by actively exploring new needs among the needs of society that are changing daily, through our proprietary technologies that have been cultivated over many years as well as newly developed technologies.

【Management philosophy】

1) Continue to provide clients with surprise and excitement

To satisfy our customers and gain their trust, we always listen to the market and continue to provide creative products and services that exceed customer expectations.

2) Coexist with society and sustain profits

We sustain profits while satisfying our customers, shareholders and employees, coexisting with local communities, and fulfilling our responsibilities to stakeholders.

3) Believe in constant change

We strive to establish a vibrant corporate culture that seeks change by respecting initiative, creativity and the spirit of challenge, while firmly sustaining our corporate culture in which products are launched with consistency and stability. We thoroughly pursue the “three real principles” (Sangen-shugi) of real places, real things and real situations, plus real people.

市場を創るものづくり

Innovation / Market Creation

A company that, alongside its customers, embarks on “first steps” that are ahead of the times

JSW is a company that creates value through “monozukuri” (good manufacturing practices). DNA that refuses to compromise on quality plus a high level of technological strength demonstrated even when faced with unprecedentedly difficult requests, attention to detail distinctive of Japanese companies, and a strong customer base built up precisely because JSW has tirelessly continued to meet highly technical requirements - this is why customers choose JSW as their partner when embarking on first steps.

技術力
Technology

The DNA of a “monozukuri” company is to make products that are durable, unbreakable and good quality

先見力
Prescient

Accurately reading the current of the times and resolutely taking on unprecedented challenges

イノベーション力
Innovation

Leveraging technological strength and expertise to establish new technologies and open up new markets

“Mastery” supporting JSW in Becoming “No. 1 Global Company in Monozukuri”



Hiroshima Plant

Dedicated to technological innovations especially in the fields of plastics and mechatronics, the Hiroshima Plant with its leading-edge manufacturing and assembly lines produces world-renowned large-size pelletizers and extruders, film and sheet production systems, and the latest plastics injection molding machines.



Yokohama Plant

Our excimer laser annealing (ELA) system for IT products, enabling mass production of high-quality LCD panels and organic EL panels, has the top share of its market. We are also developing and commercializing systems for the next generation of panels.

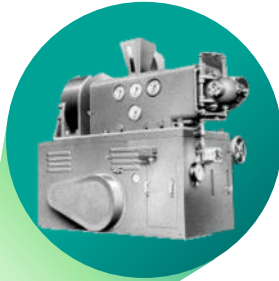
Muroran Plant

Since founding, the Muroran Plant has played a valuable part in the development of Japan's heavy and chemical industries as a materials production center. Making use of large production facilities, such as a 14,000-ton hydraulic press, and cutting-edge equipment, including a 150-ton electro-slag remelting furnace, the plant supplies the world with high-quality products that include variety of sizes of cast and forged steel products, steel plates and pipes and others for the energy field.



Utilization of artillery manufacturing technology to manufacture extruders

JSW uses hydraulic control technology built up from before the war to manufacture extruders. This marks the start of expansion of JSW's business with the plastics industry.



1950

1960

Expansion of overseas sales of pressure vessels for oil refining

JSW's large pressure vessels for oil refining utilizing forging and welding technologies build a strong reputation globally.



1970

1980

Launch of laser annealing system and entry to the panel manufacturing market

JSW contributes to expansion of the LCD market as a leading manufacturing of laser annealing systems.



2000

2010

Post-war reconstruction period

High growth period

Post-bubble era



One of the first Japanese companies to introduce injection molding technology from Europe

JSW introduces technology from a company in West Germany, and becomes one of the first Japanese companies to start manufacturing and selling injection molding machines. It later adds blow molding machines and various other molding machines to its line-up and combines this with plastic and rubber manufacturing systems to establish a position as a comprehensive resin machinery manufacturer.



First company in the world to achieve integrated manufacturing of nuclear reactor pressure vessels components through development of special forging process

JSW develops a special forging process for manufacturing large rings. This enables integrated manufacturing of nuclear reactor pressure vessels components from large steel ingots.



Start of full-scale mass production of clad steel pipes

JSW concludes framework agreements with oil companies, recognition of clad steel pipes as pipes for transportation of natural gas increases, and JSW starts mass production.

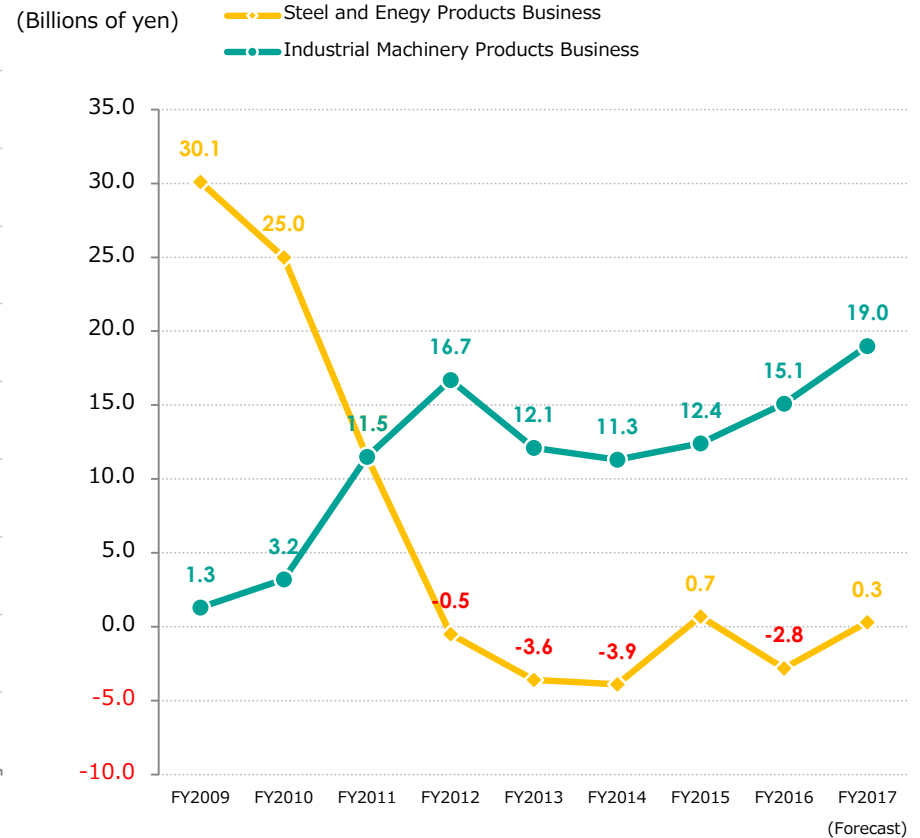
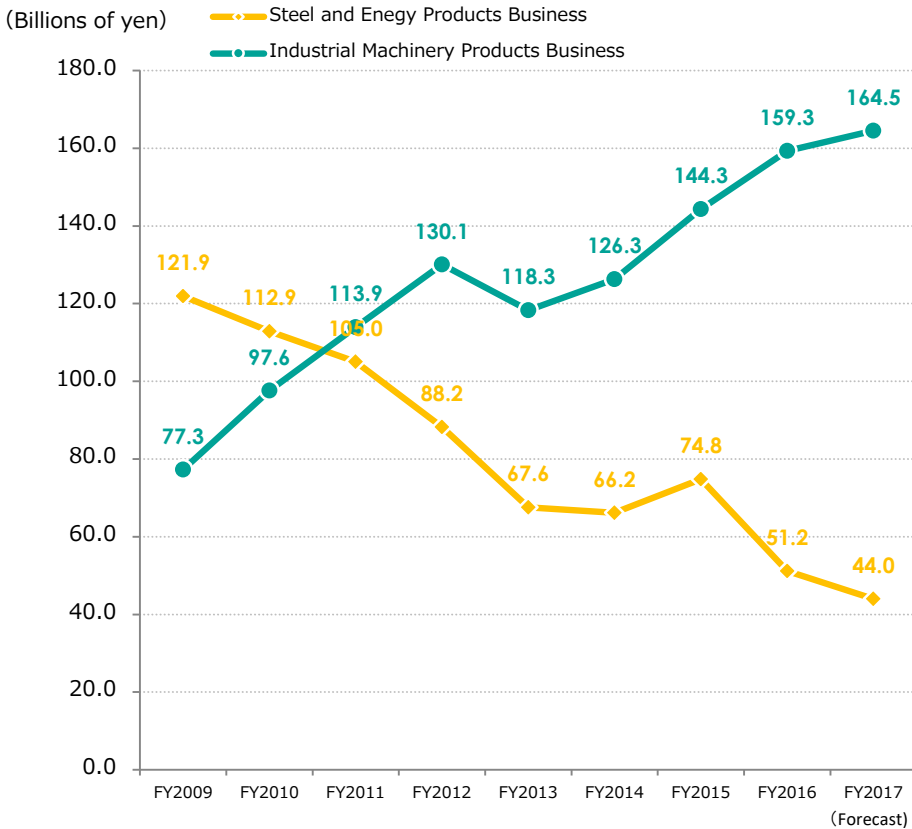
産業機械事業を成長の牽引役に

Growing Industrial Machinery

Major business changed from steel energy products to industrial machinery products

Net sales

Operating income



World's No.1 Comprehensive Plastic Machinery Manufacturer



Pelletizer

Equipment for mass production of the base material of plastics (pellets)

Feature : Manufactures some of the world's largest equipment that produces plastic pellets at constant rate of 70t/h

Market Environment : Global plastic demand is increasing at a rate of 2-3% per year

Global share: 35~40%

Twin Screw Extruder (TEX)

Equipment for manufacturing high performance plastic pellets mixed with additives

Feature : Offers a wide range of solutions, including JSW's unique technologies for enhancing mixing performance and eco-friendly manufacturing through devolatilization

Market Environment : Demand is strong, especially in Japan, China and Southeast Asia

Global share: 20~30%

※Domestic market share is over 70%

Film and sheet equipment

Equipment for manufacturing various types of plastic films and sheets

Feature : Extensive product lineup ranging from high performance optical and industrial films, etc. to general packaging applications

Market Environment : Demand for separator film for lithium-ion batteries is growing particularly strongly

Global share: For separator film 60~70%

Injection and Blow Molding Machines

Equipment for manufacturing various types of injection molded products and blow molding products

Feature : Line-up that meets diverse needs ranging from small to ultra large equipment and differentiated multi-layer technology

Market Environment : Demand for injection molding equipment is growing in the automotive market, while demand for blow molding equipment is strong in Asia and North America

Global share: Large electric injection molding machines 35~40%

(According to the company's research)

The plastics market has good growth potential.





BUSINESS RESULTS AND PROJECTIONS

Business Results for the FY2017 Interim Period and Projections for FY2017



Orders received were better than expected, and profit increased, reflecting improvement in costs

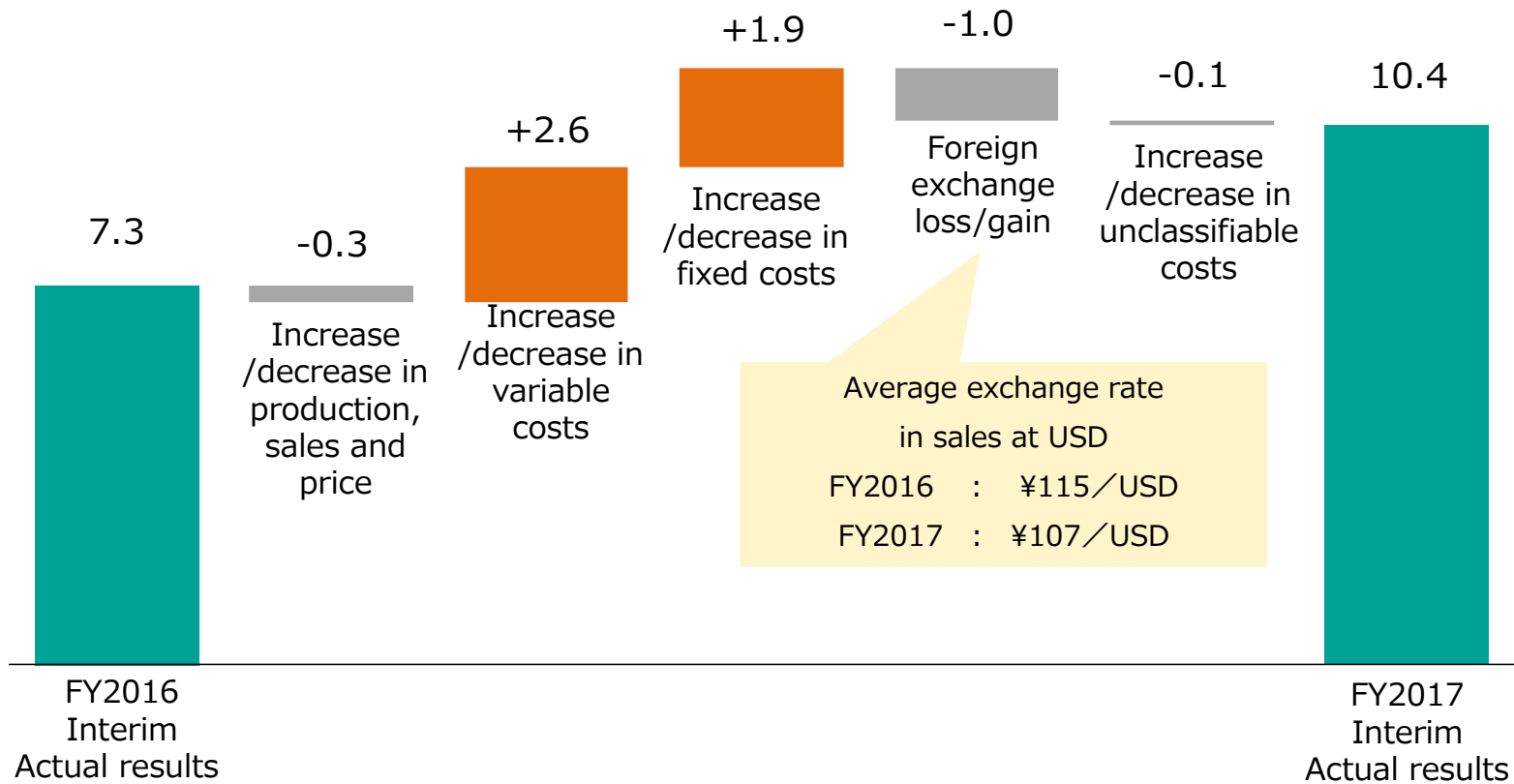
(Unit : Billions of yen)

	FY2016 Interim (A)	FY2017 Interim		Compared to the previous year (C) - (A)	Compared to the previous forecast (C) - (B)
		Previous forecast (B)	Actual results (C)		
Orders received	96.1	95.0	115.1	19.0	20.1
Net sales	107.0	105.0	105.1	(1.9)	0.1
Operating income (ratio)	7.3 6.9%	6.5 6.2%	10.4 10.0%	3.1	3.9
Ordinary income	7.4	6.5	10.3	2.9	3.8
Profit(Loss)	5.1	4.0	7.5	2.4	3.5
Profit(Loss) per share(yen)	69.53	52.82	103.32	33.79	50.50
Dividends per share (yen)	12.5	12.5	17.5	5.0	5.0

※The company conducted a 1-for-5 reverse common stock split effective on October 1,2016. For the sake of simplicity,the profit (loss) per share and dividends per share in the table above are calculated using the number of shares after the reverse stock split.

Operating income increased 43% year on year thanks to increased production and sales in Industrial Machinery Product Business and improvement in costs.

(Unit : Billions of yen)



Industrial Machinery Products Business posted gains in sales and income on the back of strong orders received, while Steel and Energy Products Business recorded decreased sales.

Steel and Energy Products Business

(Unit : Billions of yen)

	FY2016 Interim (A)	FY2017		Compared to the previous year (C) - (A)	Annual Projection Progress (C) ÷ (B)
		Annual Previous forecast (B)	Interim Period Actual results (C)		
Orders received	18.3	42.2	25.2	6.9	60%
Net sales	23.4	45.2	19.4	(4.0)	43%
Operating income(loss) (ratio)	(1.7) -7.2%	(1.1) -2.4%	(0.5) -2.8%	1.2	-45%

Industrial Machinery Products Business

	FY2016 Interim (A)	FY2017		Compared to the previous year (C) - (A)	Annual Projection Progress (C) ÷ (B)
		Annual Previous forecast (B)	Interim Period Actual results (C)		
Orders received	76.7	156.0	89.1	12.4	57%
Net sales	82.5	158.0	84.7	2.2	54%
Operating income(loss) (ratio)	9.0 10.9%	15.0 9.5%	11.1 13.1%	2.1	74%

Sales fell despite solid orders received, with large orders received for clad steel pipes.

(Unit : Billions of yen)

	Net sales, Operating income					Orders received				
	FY2016 Interim (A)	FY2017		Compared to the previous year (C) - (A)	Annual Projection Progress (C) ÷ (B)	FY2016 Interim (D)	FY2017		Compared to the previous year (F) - (D)	Annual Projection Progress (F) ÷ (E)
		Annual Previous forecast (B)	Interim period Actual results (C)				Annual Previous forecast (E)	Interim period Actual results (F)		
Electric and nuclear power	9.9	18.5	8.6	(1.3)	46%	6.0	14.5	6.5	0.5	45%
Pressure vessels for oil refineries	1.6	1.0	0.4	(1.2)	40%	0.2	1.0	0.9	0.7	90%
Clad steel plates and clad steel	3.5	13.0	4.1	0.6	32%	6.5	14.5	9.7	3.2	67%
Wind turbines	3.0	0.7	0.6	(2.4)	86%	0.3	0.7	1.0	0.7	143%
Other	2.4	5.5	1.7	(0.7)	31%	2.2	5.0	3.0	0.8	60%
Consolidated Group	3.0	6.5	4.0	1.0	62%	3.1	6.5	4.1	1.0	63%
Total	23.4	45.2	19.4	(4.0)	43%	18.3	42.2	25.2	6.9	60%
Operating income (loss)	(1.7)	(1.1)	(0.5)	1.2	45%					

Growth was driven by continued strong performances in film and sheet manufacturing equipment and molding machines.

(Unit : Billions of yen)

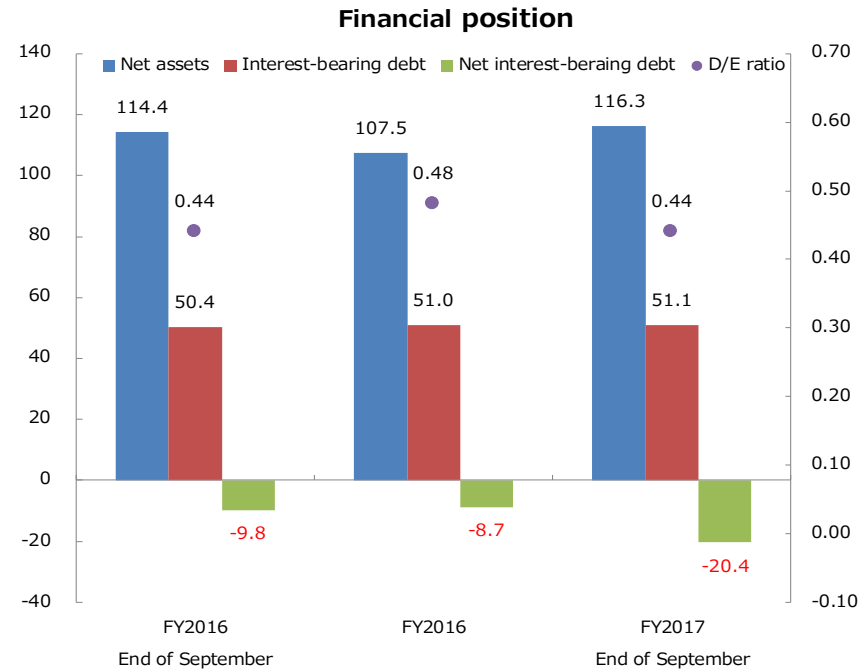
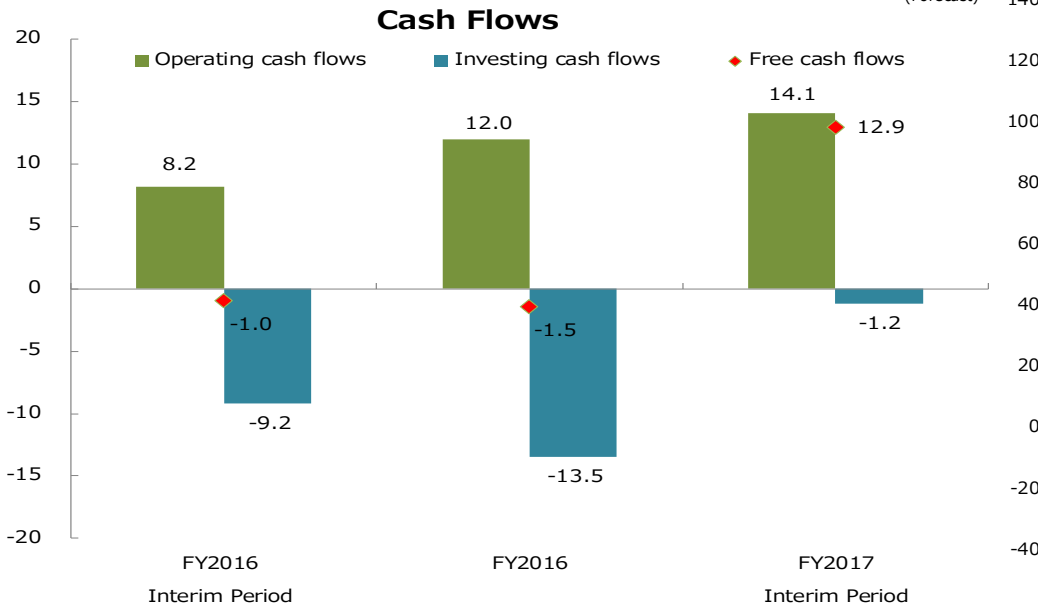
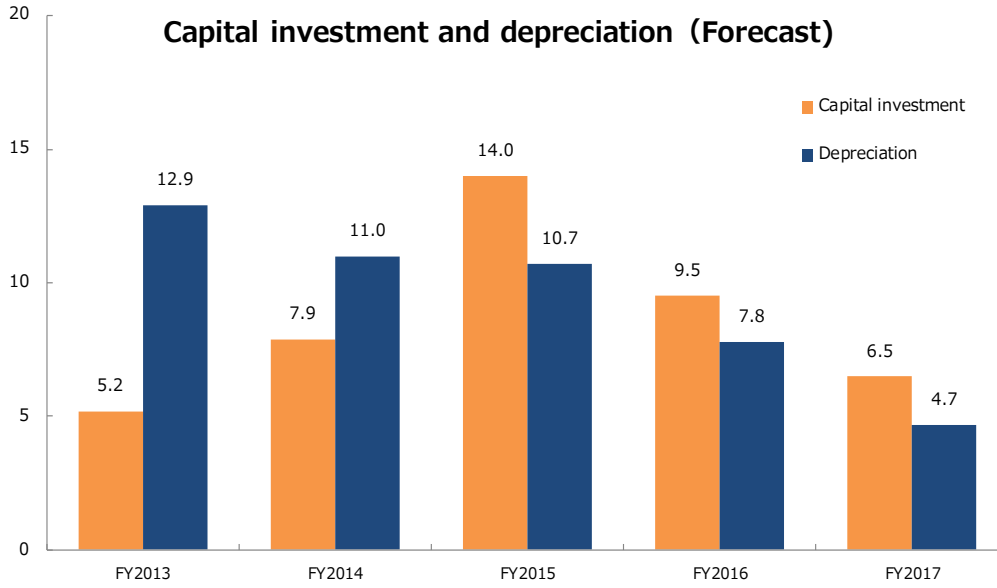
Net sales, Operating income

	FY2016 Interim (A)	FY2017		Compared to the previous year (C) - (A)	Annual Projection Progress (C) ÷ (B)
		Annual Previous forecast (B)	Interim period Actual results (C)		
Plastic production and processing machinery	18.2	45.0	26.1	7.9	58%
Molding machines (consolidated)	29.1	58.0	30.8	1.7	53%
Other	26.7	35.0	19.7	(7.0)	56%
Consolidated Group companies, etc.	8.5	20.0	8.1	(0.4)	41%
Total	82.5	158.0	84.7	2.2	54%
Operating income	9.0	15.0	11.1	2.1	74%

Orders received

	FY2016 Interim (D)	FY2017		Compared to the previous year (F) - (D)	Annual Projection Progress (F) ÷ (E)
		Annual Previous forecast (E)	Interim period Actual results (F)		
Plastic production and processing machinery	19.0	48.0	28.6	9.6	60%
Molding machines (consolidated)	28.8	59.0	34.3	5.5	58%
Other	20.9	28.0	16.2	(4.7)	58%
Consolidated Group companies, etc.	8.0	21.0	10.0	2.0	48%
Total	76.7	156.0	89.1	12.4	57%

(Unit : Billions of yen)



The company raised its projections for orders received, net sales and profits and increased the interim dividend.

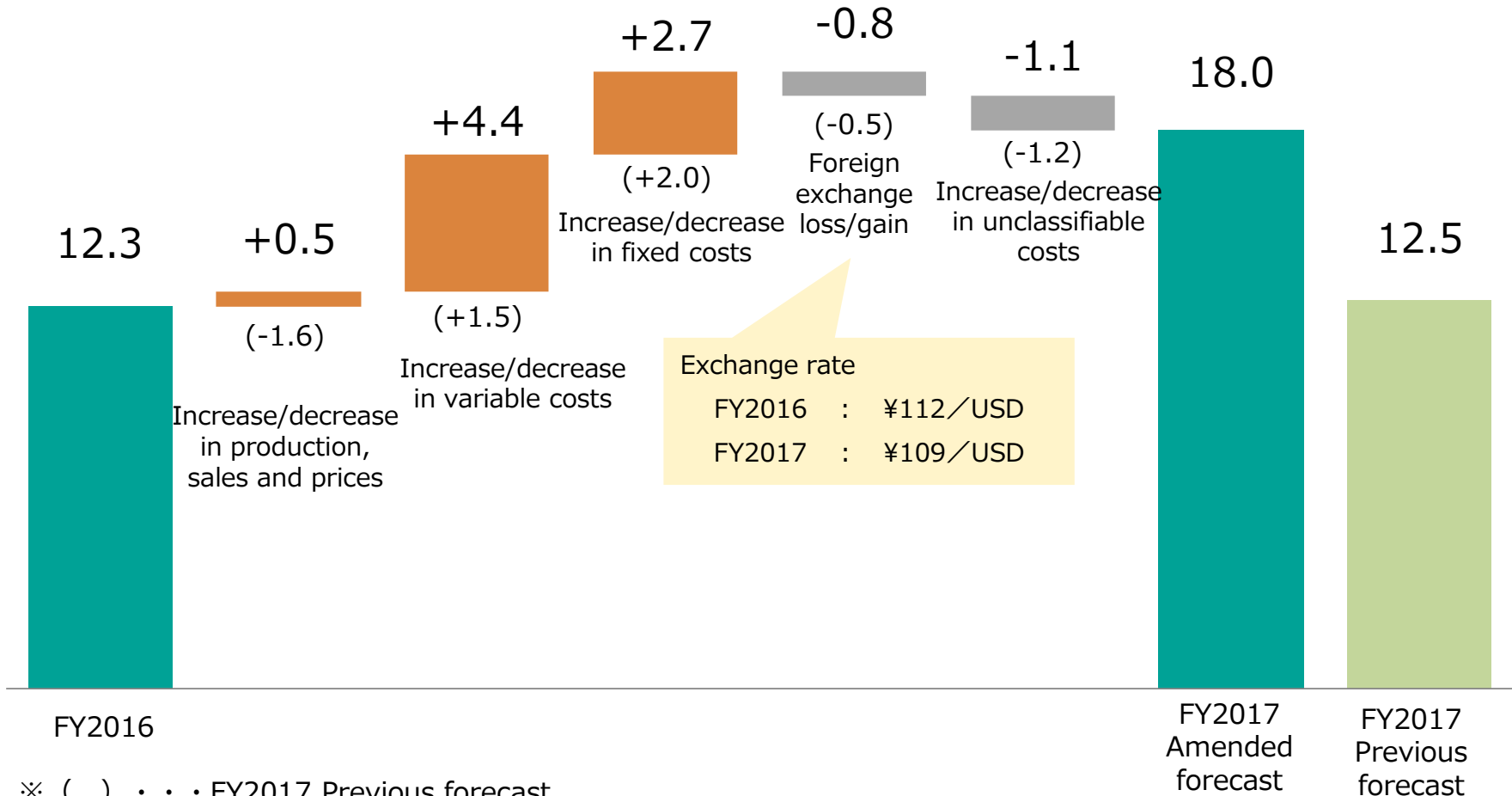
(Unit : Billions of yen)

	FY2016 (A)	FY2017 forecast				Compared to the previous year (B) - (A)
		Interim Period Actual results	Second fiscal half (forecast)	Previous forecast	Amended forecast (B)	
Orders received	177.5	115.1	104.9	200.0	220.0	42.5
Net sales	212.4	105.1	104.9	205.0	210.0	-2.4
Operating income (ratio)	12.3 5.8%	10.4 10.0%	7.6 7.2%	12.5 6.1%	18.0 8.6%	5.7
Ordinary income	12.1	10.3	7.7	12.5	18.0	5.9
Profit(Loss)	-4.9	7.5	3.5	8.0	11.0	15.9
Profit(Loss) per share (yen)	-67.61	103.32	46.36	108.85	149.68	217.29
Dividends per share(yen)	25.0	17.5	17.5	25.0	35.0	10.0

Forecast for Increase/Decrease in Operating Income for FY2017

Operating income is expected to increase by 46% year on year due to increased production and sales in Industrial Machinery Products Business and improvement in costs.

(Unit : Billions of yen)



Although the net sales forecast for the Steel and Energy Products Business has been lowered, all other projections have been raised.

Steel and Energy Products Business

(Unit : Billions of yen)

	FY2016 (A)	FY2017				Compared to the previous year (B) - (A)
		Interim Period Actual results	Second fiscal half (forecast)	Previous forecast	Amended forecast (B)	
Orders received	19.5	25.2	34.8	42.2	60.0	40.5
Net sales	51.2	19.4	24.6	45.2	44.0	(7.2)
Operating income(loss) (ratio)	(2.8) -5.5%	(0.5) -2.8%	0.8 3.3%	(1.1) -2.4%	0.3 0.7%	3.1

Industrial Machinery Products Business

	FY2016 (A)	FY2017				Compared to the previous year (B) - (A)
		Interim Period Actual results	Second fiscal half (forecast)	Previous forecast	Amended forecast (B)	
Orders received	156.2	89.1	69.4	156.0	158.5	2.3
Net sales	159.3	84.7	79.8	158.0	164.5	5.2
Operating income(loss) (ratio)	15.1 9.5%	11.1 13.1%	7.9 9.9%	15.0 9.5%	19.0 11.6%	3.9

Although orders received for clad steel pipes are expected to increase, sales are projected to fall, lagging behind orders received.

(Unit : Billions of yen)

Net sales, Operating income

	FY2017 Interim Period Actual results	FY2016 (A)	FY2017 Previous forecast	FY2017 Amended forecast (B)	Compared to the previous year (B)-(A)
Electric and nuclear power	8.6	19.3	18.5	17.5	(1.8)
Pressure vessels for oil refineries	0.4	1.7	1.0	1.0	(0.7)
Clad steel plates and clad steel	4.1	13.5	13.0	10.0	(3.5)
Wind turbines	0.6	3.9	0.7	1.0	(2.9)
Other	1.7	5.3	5.5	6.0	0.7
Consolidated Group	4.0	7.5	6.5	8.5	1.0
Total	19.4	51.2	45.2	44.0	(7.2)
Operating income(loss)	(0.5)	(2.8)	(1.1)	0.3	3.1

Order Received

	FY2017 Interim Period Actual results	FY2016 (C)	FY2017 Previous forecast	FY2017 Amended forecast (D)	Compared to the previous year (D)-(C)
	6.5	11.1	14.5	15.0	3.9
	0.9	0.5	1.0	1.0	0.5
	9.7	8.2	14.5	29.0	20.8
	1.0	(13.3)	0.7	1.0	14.3
	3.0	5.4	5.0	6.0	0.6
	4.1	7.6	6.5	8.0	0.4
	25.2	19.5	42.2	60.0	40.5

Projections for orders received and net sales for both plastic production and processing machinery and molding machines have been raised.

(Unit : Billions of yen)

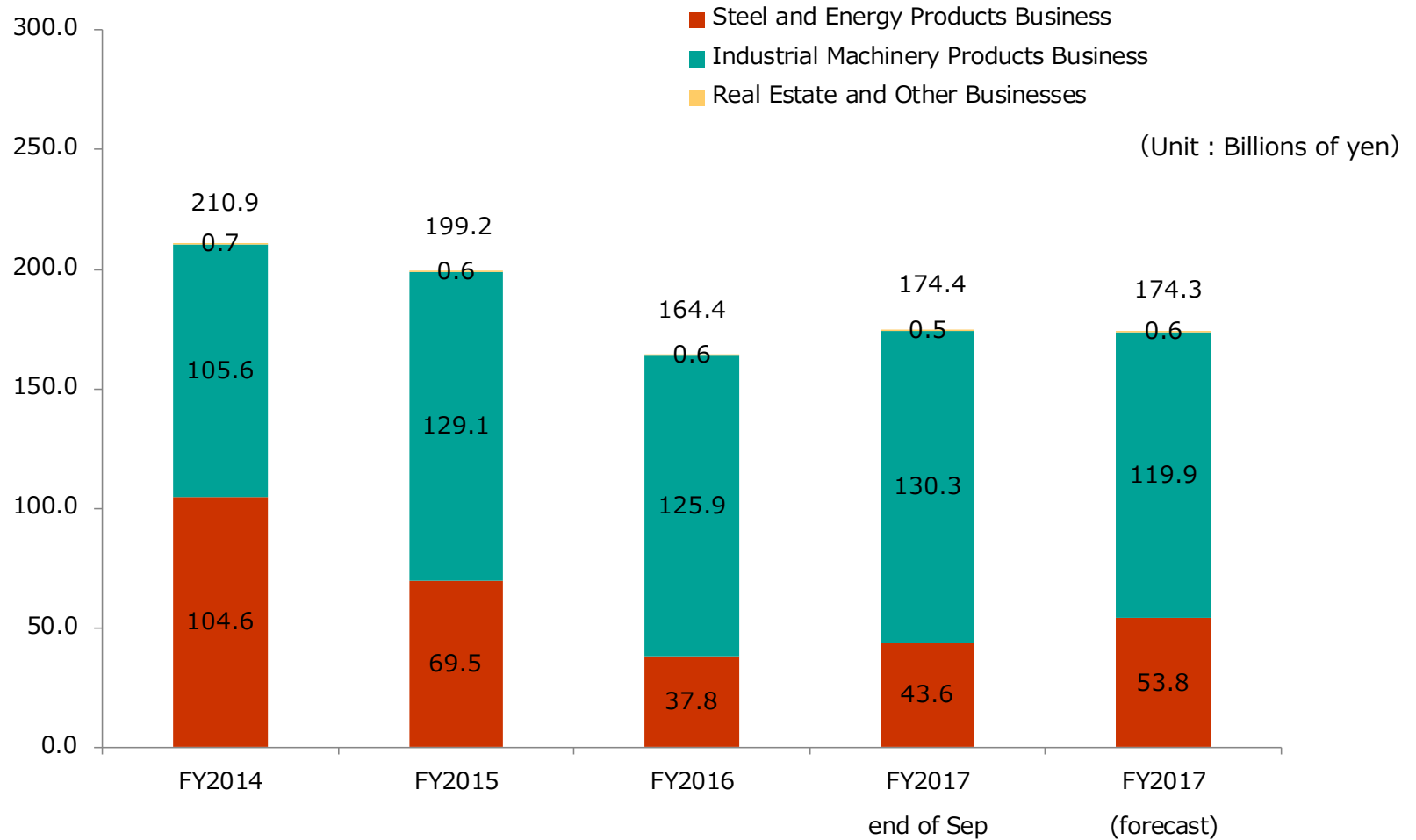
Net sales, Operating income

	FY2017 Interim Period Actual results	FY2016 (A)	FY2017 Previous forecast	FY2017 Amended forecast (B)	Compared to the previous year (B)-(A)
Plastic production and processing machinery	26.1	36.1	45.0	50.0	13.9
Molding machines (consolidated)	30.8	57.6	58.0	61.0	3.4
Other	19.7	46.8	35.0	35.5	(11.3)
Consolidated Group companies, etc.	8.1	18.8	20.0	18.0	(0.8)
Total	84.7	159.3	158.0	164.5	5.2
Operating income	11.1	15.1	15.0	19.0	3.9

Order Received

	FY2017 Interim Period Actual results	FY2016 (C)	FY2017 Previous forecast	FY2017 Amended forecast (D)	Compared to the previous year (D)-(C)
	28.6	44.7	48.0	50.0	5.3
	34.3	57.5	59.0	60.0	2.5
	16.2	34.2	28.0	30.0	(4.2)
	10.0	19.8	21.0	18.5	(1.3)
Total	89.1	156.2	156.0	158.5	2.3

Trends and Forecasts for Order Backlog by Segment





MEDIUM-TERM MANAGEMENT PLAN

Progress of Medium-term Management Plan “JGP2017” and direction



“Advancing toward Top Global & Niche Corporate Group”

Aiming to achieve top share at key points in customer value chains

Basic Policies

Policy 1

Increase profitability of existing businesses

Policy 2

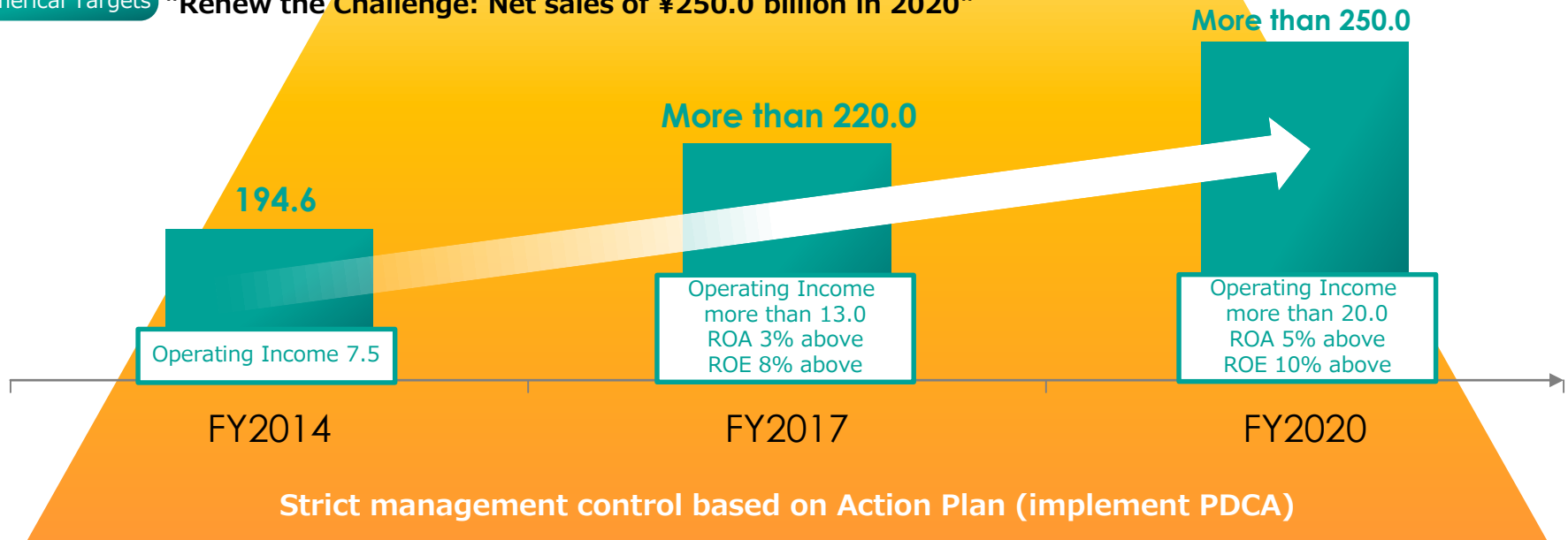
Foster new products & businesses and make them competitive as soon as possible

Policy 3

Reinforce Group management and promote alliances

Numerical Targets

“Renew the Challenge: Net sales of ¥250.0 billion in 2020”



Steel and Energy Products Business looks set to return to profitability, and Industrial Machinery Products Business achieved targets early and is expected to grow even further.

Historical Results

Steel and Energy Products Business

Strategy for steady business growth and renewed growth after JGP2017 through "defensive management"

Billions of yen	FY2016	FY2017 forecast	JGP2017 (FY2017)
Net Sales	51.2	44.0	60.0
Operating income	(2.8)	0.3	0

Although fixed costs were reduced due to an impairment loss, an operating loss was posted, reflecting a significant decrease in sales of clad steel pipes for natural gas.

Order environment remains challenging but loss is expected to be eliminated mainly due to contribution of impairment for two consecutive fiscal years and staff mobility, etc.

Industrial Machinery Products Business

Identify growth opportunities and accelerate business expansion through "offensive management"

Billions of yen	FY2016	FY2017 forecast	JGP2017 (FY2017)
Net Sales	159.3	164.5	158.0
Operation income	15.1	19.0	14.0

Both net sales and operating income in FY2016 achieved the targets for the final fiscal year of the medium-term management plan a year ahead of schedule on the back of strong orders.

Performance will be strong, driven by film and sheet manufacturing equipment and molding machines. Net sales and operating income are expected to further exceed the medium-term management plan targets reached in FY2016.

Increase profitability of existing businesses

- Achieved higher productivity and lower costs in film and sheet manufacturing systems and injection molding machines through capital investment
- Profitability also grew through expansion of service business
- Although market conditions in Steel and Energy Products Business are challenging, a return to profitability through the reduction of fixed costs is in sight.



Foster new products & businesses and make them competitive as soon as possible

- Slow in fostering new businesses generally
- R&D Headquarters was reorganized into Technology Strategy Office and New Business Promotion Headquarters on October 1 to promote development. Need to promote and increase fostering of new businesses.



Reinforce Group management and promote alliances

- Made steady progress investing management resources in Hiroshima Plant, improving profitability of affiliated companies, and strengthening corporate governance.
- Although small business acquisitions are underway, far-reaching initiatives to strengthen alliances are lacking.
- Muroran reconstruction project is advancing steadily.



	Product Group	Status at Start of JGP2017 (March 31, 2015)	JGP2017 Results and Issues
Steel and Energy Products Business	Electric and nuclear power products	<p>【Reinforce competitiveness】</p> <ul style="list-style-type: none"> Develop in full-scale large size monoblock LP rotor using 670 ton steel ingot. Win overseas orders by strengthening cost competitiveness and maintaining competitive advantages. 	<p>【Nuclear power】 Monitored the status of resumption of operation in Japan and demand trends overseas, mainly in China and the U.K. Orders are not likely to increase in the short term.</p> <p>【Thermal power】 Large thermal power plants, which is the company's strength, declined, while small-scale plants increased. Need to further improve cost competitiveness. Continue developing environmentally friendly high efficiency power generation applications</p>
	Clad steel plates and clad steel pipes	<p>【Expand businesses】</p> <ul style="list-style-type: none"> Increase capital investment and productivity. Improve response to natural gas projects and extend range of specifications. 	<p>【Clad pipes】 The number of projects fell and orders received decreased due to demand off season. Made capital investment in some areas but has no evident effect as production volume was low.</p> <p>【Clad plates】 Falling oil prices led to fewer projects and lackluster demand. Applications in new markets need to be developed.</p>
Industrial Machinery Products Business	Film and sheet equipment	<p>【Expand businesses】</p> <ul style="list-style-type: none"> Enhance response to full-line systems. Accelerate global expansion (China plus one and others) . Expand business domain through alliances. 	<ul style="list-style-type: none"> Demand for use in separator film remained strong. Promote expansion of production capacity and strengthening of alliances.
	Injection molding machines	<p>【Expand businesses : Medium- and large-size injection molding Machines】</p> <ul style="list-style-type: none"> Reinforce production systems and introduce/market new series of models. <p>【Optimize businesses: Small-size injection molding machines】</p> <ul style="list-style-type: none"> Strengthen product competitiveness based on alliances. 	<ul style="list-style-type: none"> Expanded production capacity for medium- and large-sized injection molding machines through capital investment. Achieved sales expansion through market introduction of J-ADS series. Make a start on new sales and technology strategies for further rapid growth as a comprehensive manufacturer under the next medium-term management plan.
	Laser plasma related equipment	<p>【Reinforce competitiveness】</p> <ul style="list-style-type: none"> Develop differentiated technologies for HD panels. Reinforce service business (China). 	<ul style="list-style-type: none"> Promoted development of differentiated technologies for large models, high performance, high productivity, etc. Service business grew steadily. Secure market for OLEDs and enter markets where growth can be expected.

JGP2020 ~Lay foundations looking ahead to 2030~

◆ “Growth” in Industrial Machinery Products Business, “Rebirth in Steel and Energy Products Business

(1) Optimize management resources and strengthen alliances

Rationalization through reallocation of management resources

⇒ Actively invest in Industrial Machinery Products Business and restructure Steel and Energy Products Business according to sales

Scale up business by promoting alliances and M&A

⇒ Move away from principle of self-sufficiency

(2) Strengthen after-sales services (stock-based business)

Strengthen foundations of service structure focusing on Industrial Machinery Products Business

⇒ Generate stable profits and increase customer satisfaction

Build strong customer base through service business

⇒ Lay foundations for next businesses

(3) Increase exploration and fostering of new businesses

Technology Strategy Office ⇒ Explore new businesses with an eye on megatrends

New Business Promotion Headquarters ⇒ Foster and develop business in four areas: aircraft components, hydrogen, crystal device and film formation

“Growth” in Industrial Machinery Products Business,
“Rebirth” in Steel and Energy Products Business

Industrial Machinery Products
Business

Steel and Energy Products Business

Growth Rebirth

Steel and Energy Products Business

Expand into new fields and develop new products



Basic policy

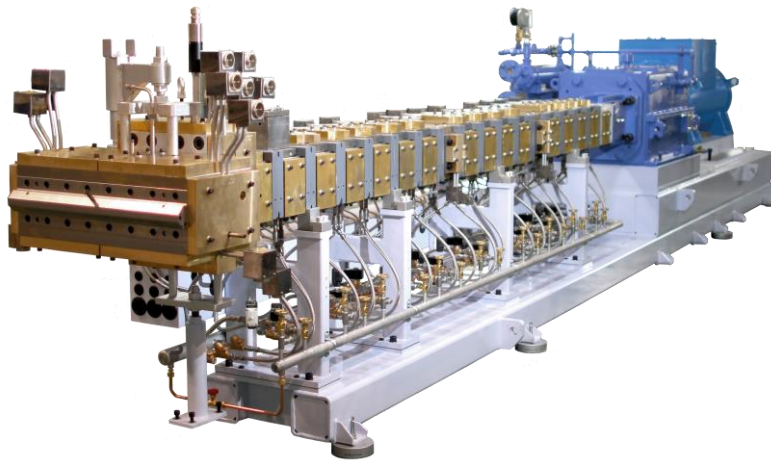
- Switch to business structure for achieving profitability in existing products
- Expand into new fields and develop new products

Measures

- Complete cost reforms for existing products by streamlining production structure
- Use management resources effectively
 - Production resources: Examine collaboration with Tsukishima Kikai Co., Ltd.
 - Human resource : Move to other business departments or plants
- Promote development investment to enter new fields related to materials other than steel (Aircraft components and crystal device etc.)

Industrial Machinery Products Business ~Plastic production and processing~

Upscale business and pursue profitability



Twin-Screw Extruders TEX54aIII

Basic policy

- Establish a leading position among comprehensive plastics machinery manufactures in the world.
- Expand business domains and profitability in existing businesses

Measures

- Expand profitability by actively investing in growing products (LiB separators, products for automotive applications)
- Promote alliances and M&A systematically to expand the businesses
- Strengthen operations in new growth markets (carbon fiber market, cellulose nanofiber market)

Industrial Machinery Products Business ~Molding machines~

Mass customization strategy

【Mass customization strategy】

Provide differentiated, customized machines based on a common base to meet the needs of areas and customers



Injection Molding Machine/J-ADS series (J100ADS)

Basic policy

- Build well-established JSW molding machine brands through mass customization strategy

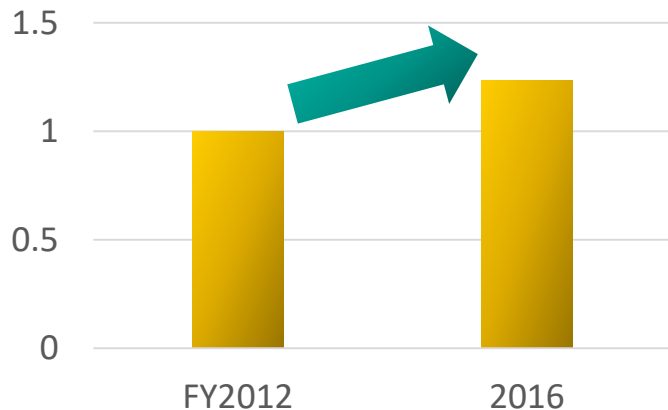
Measures

- Focus strength on four priority regions: Japan, North America, China and Southeast Asia, and provide distinctive products and services for each region to meet their specific needs
- Provide products under the mass customization strategy and improve profits
- Offer customers total solutions through products and technology with an even more advanced controller, and incorporation of the IoT and AI
- Pursue and increase Group synergy with Meiki, and enter market for large-size machines exceeding 2-platen (clamp capacity exceeding 3,000 tons)
- Strengthen capabilities to deal with customized products at plants in China and other overseas plants.

Industrial Machinery Products Business ~Service business~

Strengthen foundations and increase
customer satisfaction

Sales of Service business
(Index : 2012=1)



Basic policy

- Further strengthen and expand service business as source of stable income

Measures

- Plastic production and processing machinery, Injection molding machine :
Innovate and improve services by strengthening global structure and utilizing the IoT
Shift from passive services to proposal of solutions
- Laser annealing equipment :
Strengthen service structure with overseas subsidiaries (China) playing a key role
- Collaborate with manufacturers of related equipment in providing services



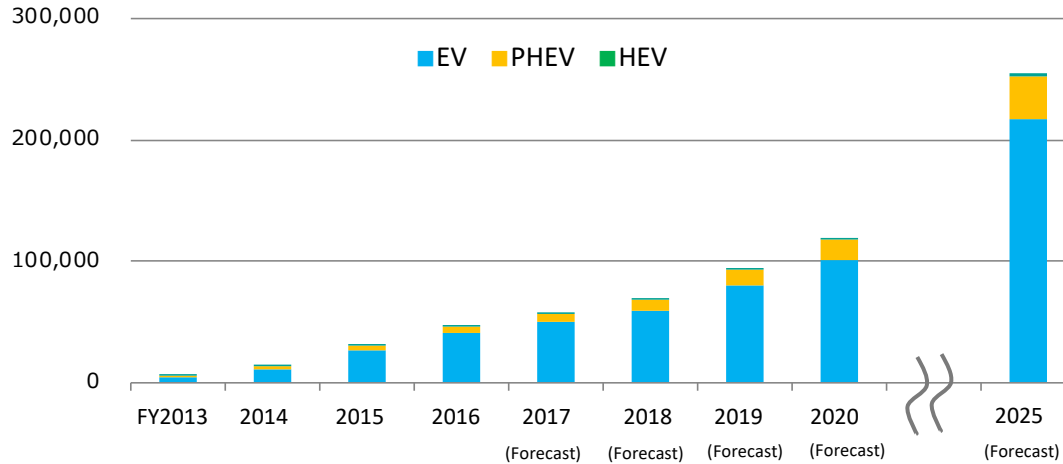
TOPICS

Latest Topics



Systematically promoting increased production to meet strong demand for lithium-ion batteries (LiB)

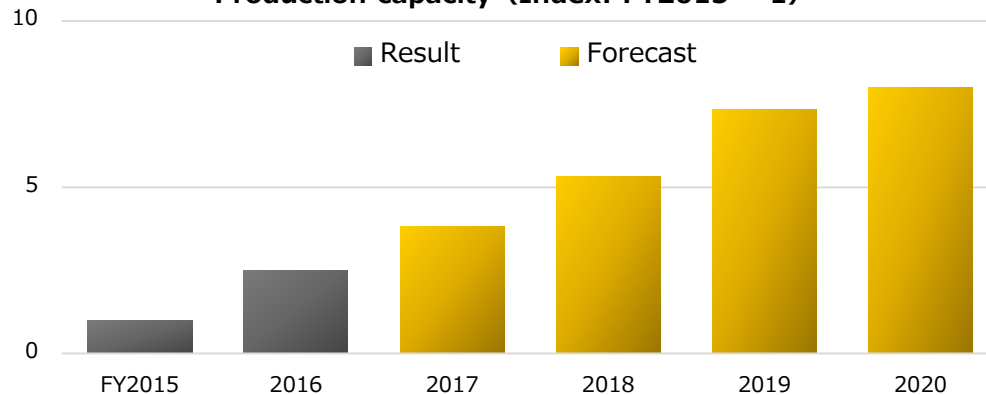
(Unit : MWh) **Trend and Forecast for Global Market of Automotive Lithium-ion Batteries**



Film and sheet equipment

(Yano Research institute, Ltd. "Study of Global Market of Automotive Lithium-ion Batteries (2017)" published Oct. 20, 2017)

Production capacity (Index: FY2015 = 1)



Aim

To strengthen position as world's No. 1 manufacturer of film and sheet manufacturing equipment

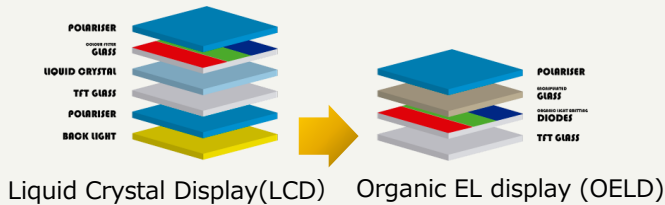
Measures

- Increase production capacity to meet special demand for separator film
- Enhance alliance
- Enhance service

Increasing share and profitability in the expanding display market

Expansion of business opportunities

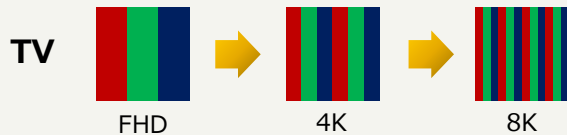
To organic EL (Smart phone)



Expansion of screen size



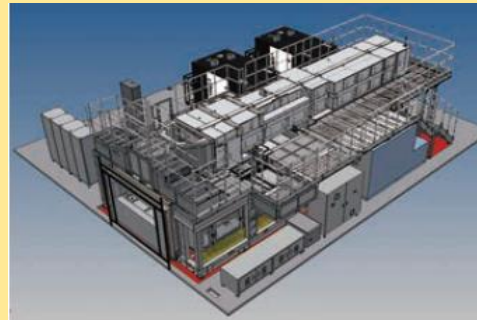
To high definition (Large display)



Flexible

→Bend、Fold、Round

Laser annealing systems (ELA)



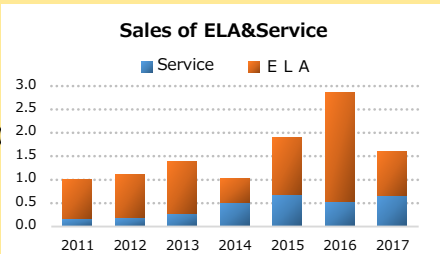
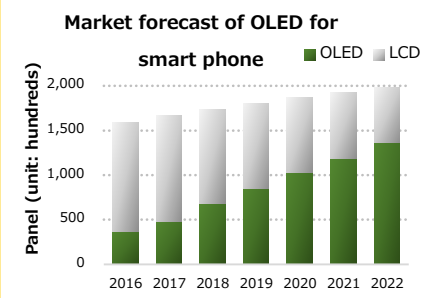
ELA system for OLED

Use

Thin film transistor (TFT) manufacturing process
(amorphous silicon thin film crystallization)

Feature

High output laser oscillator (optical)
Uses large-scale high-precision stage



Launch of new products

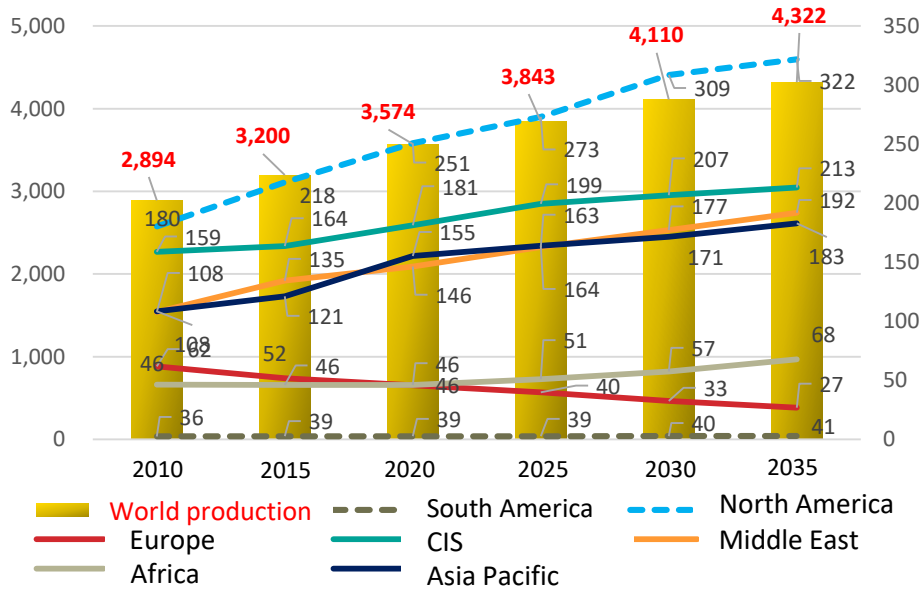
- ELA system : Large high-precision display (TVs, etc.)
- Peel system : Flexible display (glass peeling)
- Film formation equipment: Flexible display (sealing film)

Demand for natural gas continues to increase ~ Ongoing demand expected ~

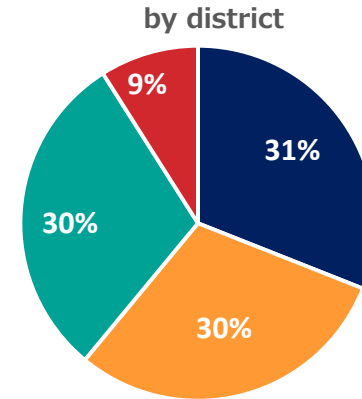
Production of Natural gas

(Million tonnes oil equivalent)

2010 global production (average of seven regions) = 100



FY2010-2016 Breakdown of sales for clad steel pipes by district



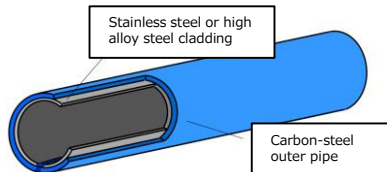
■ Asia Pacific ■ Middle East ■ CIS ■ Europe

During the next-medium-term management plan JGP2020, the company would like to win projects, focusing on the Middle East and Asia Pacific regions where the production of corrosive gases is expected.

• Source: Index produced by the company based on BP's Natural gas - Statistical Review 2017 (million tonnes of oil equivalent)

What are clad steel pipes ? :

Corrosion-resistant composite steel pipes used to transport natural gas



Strengths of JSW clad steel pipes

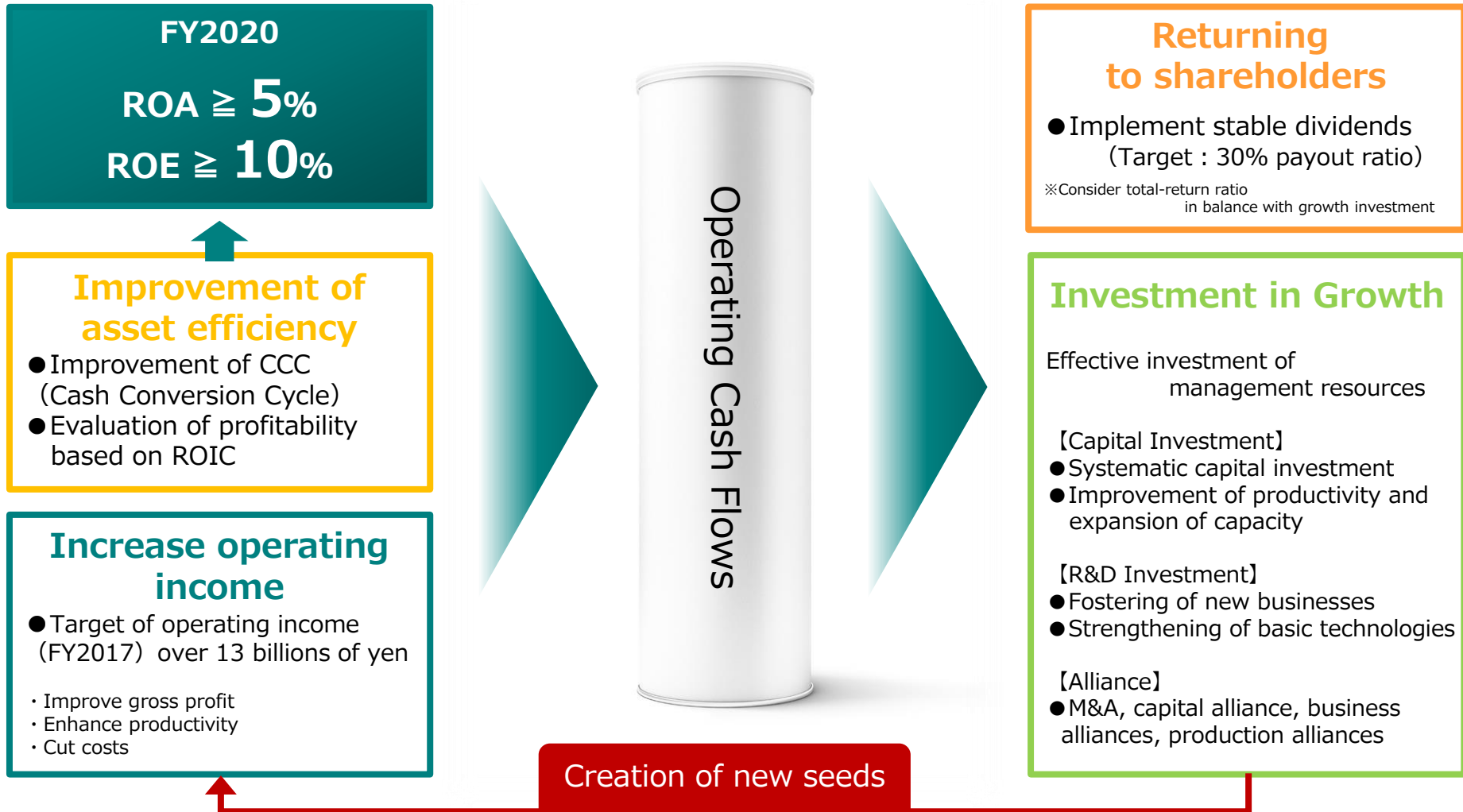
- (1) Only clad steel pipe manufacturer in the world capable of integrated production from clad steel plates (Uses metallurgically bonded high performance clad steel plates)
- (2) High level of technological strength and reliability (High level of knowledge and extensive expertise in materials and welding technology)
- (3) Extensive track record (main customers are leading oil companies)



FINANCIAL STRATEGIES



Enhance corporate value by strengthening cash-generating ability and utilizing cash flows effectively.





REFERENCE



Trends of Net sale, Operating income and Profit

	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017 (forecast)
Net Sales	221.3	220.6	188.7	194.6	223.3	212.4	210.0
Steel and Energy Products Business	105.0	88.2	67.6	66.2	74.8	51.2	44.0
Electric and nuclear power	49.0	37.4	22.6	27.4	19.2	19.3	18.0
Pressure vessels for oil refineries	5.5	4.3	4.1	4.2	1.4	1.7	1.0
Clad steel plates and pipes	31.7	29.3	26.7	16.2	39.3	13.5	10.0
Wind turbines	3.9	1.1	1.7	5.7	1.2	3.9	1.0
Other	8.9	12.3	7.2	7.0	6.9	5.3	6.0
Consolidated Group companies, etc.	6.0	3.8	5.3	5.7	6.8	7.5	8.0
Industrial Machinery Products Business	113.9	130.1	118.3	126.3	144.3	159.3	164.5
Plastic production and processing machinery	33.8	37.0	28.3	32.5	36.4	36.1	50.0
Molding machines(consolidated)	34.7	40.9	47.0	53.6	56.4	57.6	61.0
Other	32.5	37.7	31.8	25.0	32.6	46.8	35.5
Consolidated Group companies, etc.	12.7	14.5	11.2	15.2	18.9	18.8	18.0
Real Estate and Other Businesses	2.4	2.2	2.7	2.0	4.0	1.8	1.5
Operating Income	23.9	16.6	8.8	7.5	14.4	12.3	18.0
Steel and Energy Products Business	11.5	-0.5	-3.6	-3.9	0.7	-2.8	0.3
Industrial Machinery Products Business	11.5	16.7	12.1	11.3	12.4	15.1	19.0
Real Estate and Other Businesses	0.7	0.8	1.1	0.9	2.0	0.9	0.8
Profit	12.5	8.2	5.5	-5.3	-16.6	-4.9	11.0

	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017 Interim
Total assets	325.6	303.9	293.1	319.6	293.1	275.3	281.2
Steel and Energy Products Business	147.2	120.2	111.5	111.4	60.2	37.5	-
Industrial Machinery Products Business	93.1	96.8	99.3	108.4	124.3	123.7	-
Real Estate and Other Businesses	13.5	13.3	12.9	13.0	12.0	11.8	-
Net assets	128.6	134.3	139.2	138.2	111.3	107.5	116.3
Net assets per share (JPY) ※Since FY2016, amount is after reserve split of stocks	344.28	359.29	372.83	368.81	299.41	1,446.44	1,564.75
Equity ratio (%)	39.21	43.83	47.09	42.72	37.53	38.6	40.9
ROE (%)	10.17	6.35	4.07	-3.88	-13.46	-4.6	-
Operating cash flow	32.5	23.7	11.5	11.5	19.7	12.0	14.1
Investing cash flow	-18.6	-5.8	-5.7	-2.6	-12.1	-13.5	-1.2
Financial cash flow	-6.8	-15.2	-15.0	-2.9	4.7	-1.2	-1.1
Cash and cash equivalents at end of period	48.1	50.9	42.2	49.1	61.4	58.6	70.3



進

答えはいつも先にある。
 後ろを振り返るよりも、
 一步でも前に突き進む。
 ものづくりの未来を変える。

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 日本製鋼所



速

目の前には誰の背中もないこと、
 新たな時代を拓くものには、
 先頭を行く速さが必要だ。
 ものづくりの未来を変える。

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柔

ゴールへ達する速のりは、
 決して1つではない。
 柔らかな発想は人間の特技だ。
 ものづくりの未来を変える。

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超

高みを求められるほど
 さらに上を飛んでみたくなる。
 想像するスケールを軽く超えていく。
 ものづくりの未来を変える。

JSW
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 日本製鋼所



攻

守り続けるだけでは、
 新しい道は開かない。
 攻め続けることが、やがて時代を開かす。
 ものづくりの未来を変える。

JSW
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A close-up photograph of a hand with a finger pointing towards a circular button. The button is dark with a metallic rim and contains the text 'FUTURE' above a horizontal line and 'START' below it. The background is dark and textured.

FUTURE
START

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