



**FY 2018**

Business Results for the Six Months  
of the Fiscal Year Ending March 31, 2019

November 14, 2018

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

**JSW**

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.

Starting from the fiscal year ending March 31, 2019, the Company modified the disclosure classifications for the results of the main products and re-totaled the results of the previous year based on these modified classifications, unless otherwise stated.

Accordingly, the totaled figures differ from those in the previous presentation materials.

Unless otherwise noted, “previous forecast values” are those released on May 18, 2018.

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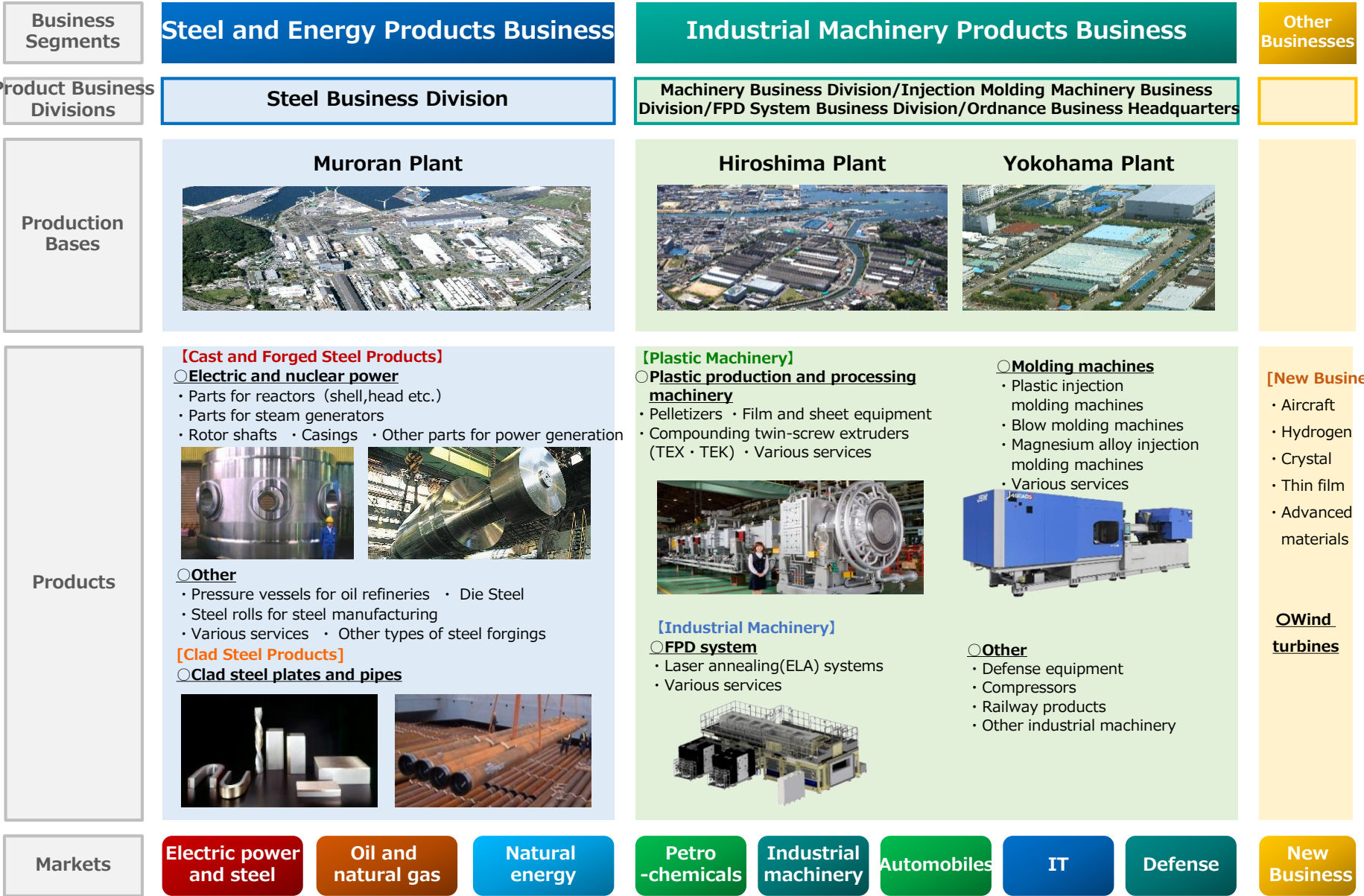
## Reference (36~39) :

- Changes in Disclosure Categories by Main Product

- Trend of Net sales, Operating income and Profit

- Trends of assets situation and cash flow

- Corporate Code of Behavior of JSW (revised on April 1, 2018)





# BUSINESS RESULTS AND PROJECTIONS

Business Results for the FY2018 first half and Projections for FY2018

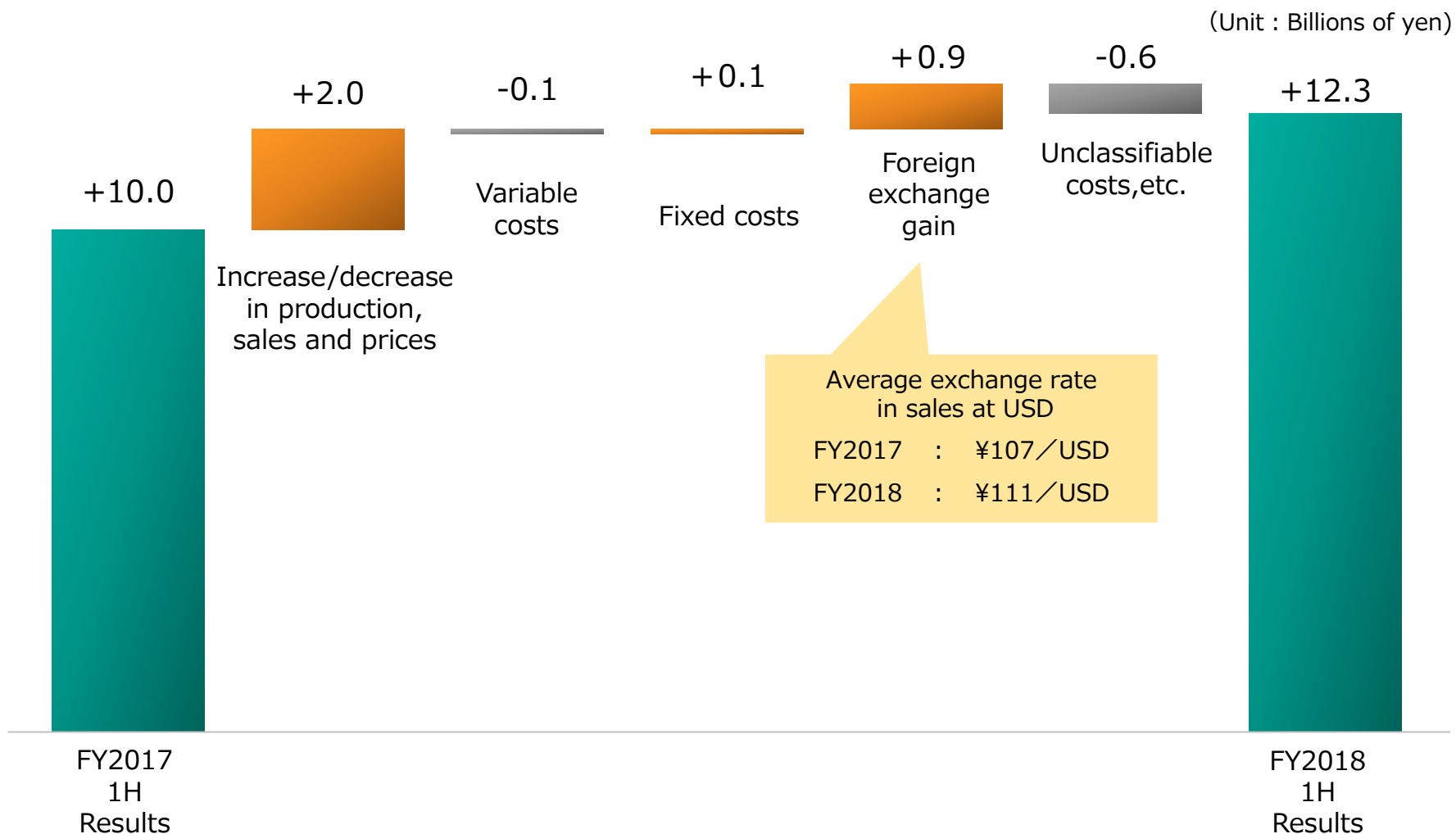


Order received was better than year on year, and profit increased due to increased sales

(Unit : Billions of yen)

	FY2017 1H (A)	FY2018 1H			vs FY2017 (D) - (A)	vs previous forecast (D) - (B)
		Previous Forecast (B)	After 1Q, Revised forecast (C)	Results (D)		
Orders received	114.6	110.0	—	123.7	9.1	13.7
Net sales	104.4	110.0	113.0	109.6	5.2	-0.4
Operating income (ratio)	10.0 9.6%	10.0 9.1%	11.0 9.7%	12.3 11.2%	2.3 1.6%	2.3 2.1%
Ordinary income	10.3	10.0	11.0	13.6	3.3	3.6
Profit(Loss)	7.5	8.0	10.0	11.9	4.4	3.9
Profit(Loss) Per share(yen)	103.32	108.86	136.07	162.52	59.2	53.66
Dividends per share(yen)	17.5	25	—	25	7.5	0

Operating income increased 23% year on year due to increased production and sales and foreign exchange gain



Industrial Machinery Products Business has strong orders received, and Steel and Energy Products Business gains in sales and income.

(Unit : Billions of yen)

### Industrial Machinery Products Business

	FY2017 1H Results (A)	FY2018		vs FY2017 (C) - (A)	Full year projection progress (C) ÷ (B)
		Full year Previous forecast (B)	1H Results (C)		
Orders received	88.2	180.0	103.7	15.5	58%
Net sales	84.3	170.0	84.9	0.6	50%
Operating income (ratio)	11.0 13.0%	23.5 13.8%	11.5 13.5%	0.5 0.5%	49%

### Steel and Energy Products Business

	FY2017 1H Results (D)	FY2018		vs FY2017 (F) - (D)	Full year projection progress (F) ÷ (E)
		Full year Previous forecast (E)	1H results (F)		
Orders received	22.7	45.0	16.5	-6.2	37%
Net sales	17.5	45.0	22.1	4.6	49%
Operating income (ratio)	-0.3 -1.7%	0.5 1.1%	1.8 8.1%	2.1 9.8%	360%



Orders for plastic production and processing machinery and molding machines continued to be strong. Orders for other equipment increased due to an order received ahead of schedule.

(Unit : Billions of yen)

## Net sales · Operating income

## Orders received

	FY2017 1H Results (A)	FY2018		vs FY2017 (C) - (A)	Full year projection progress (C) ÷ (B)	FY2017 1H Results (D)	FY2018		vs FY2017 (F) - (D)	Full year projection progress (F) ÷ (E)
		Full year Previous forecast (B)	1H Results (C)				Full year Previous forecast (E)	1H Results (F)		
Plastic production and processing machinery	26.1	61.0	24.4	-1.7	40%	28.6	67.0	33.8	5.2	50%
Molding Machines (consolidated)	30.8	65.0	34.5	3.7	53%	34.3	67.0	40.3	6.0	60%
FPD systems (consolidated)	7.6	15.0	8.5	0.9	57%	9.5	17.0	6.1	-3.4	36%
Other	15.1	18.0	11.9	-3.2	66%	9.9	18.0	20.1	10.2	112%
Consolidated group companies, etc.	4.7	11.0	5.6	0.9	51%	5.9	11.0	3.4	-2.5	31%
<b>Total</b>	<b>84.3</b>	<b>170.0</b>	<b>84.9</b>	<b>0.6</b>	<b>50%</b>	<b>88.2</b>	<b>180.0</b>	<b>103.7</b>	<b>15.5</b>	<b>58%</b>
<b>Operating income</b>	<b>11.0</b>	<b>23.5</b>	<b>11.5</b>	<b>0.5</b>	<b>49%</b>					

Net sales increased because the posting of sales for some clad steel pipes was moved up from the second half. Overall orders declined.

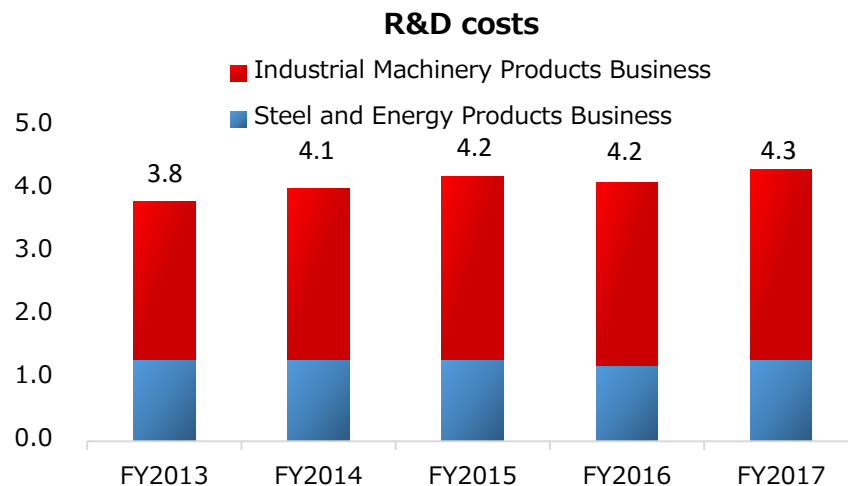
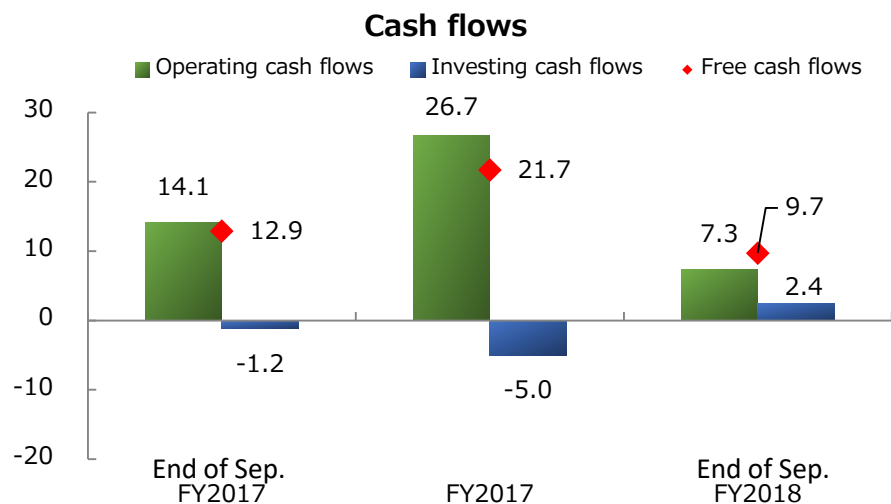
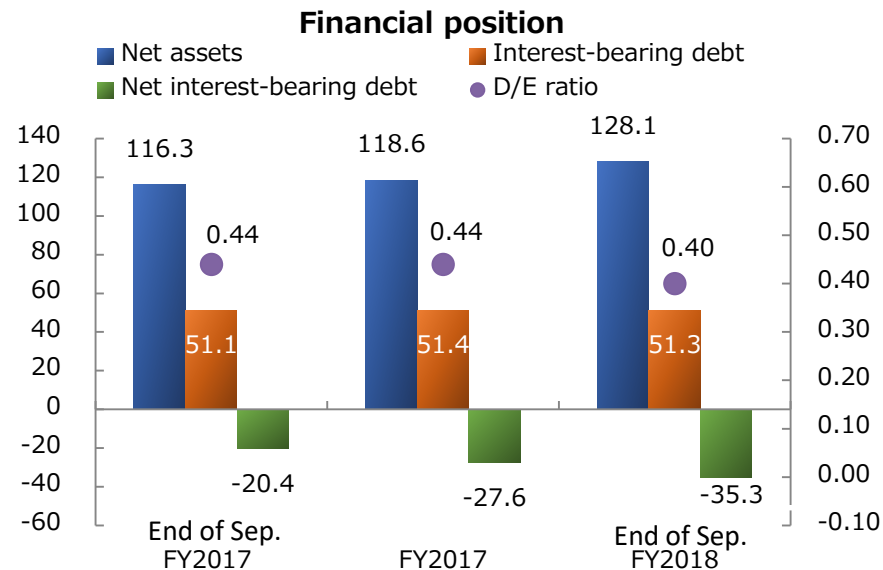
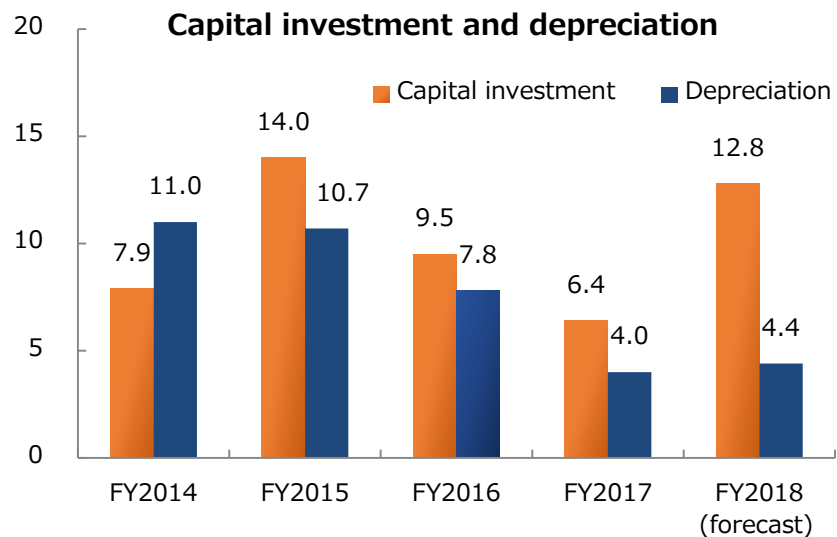
(Unit : Billions of yen)

## Net sales, Operating income

## Orders received

	FY2017 1H Results (A)	FY2018		vs FY2017 (C) - (A)	Full year projection progress (C) ÷ (B)	FY2017 1H Results (D)	FY2018		vs FY2017 (F) - (D)	Full year projection progress (F) ÷ (E)
		Full year Previous forecast (B)	1H Results (C)				Full year Previous forecast (E)	1H Results (F)		
Electric and nuclear power	8.6	16.0	6.6	-2.0	41%	6.5	15.0	2.8	-3.7	19%
Clad steel plates and pipes	4.1	13.0	9.0	4.9	69%	9.7	15.0	7.3	-2.4	49%
Other	2.2	10.0	3.8	1.6	38%	3.9	9.0	3.7	-0.2	41%
Consolidated group companies, etc.	2.6	6.0	2.7	0.1	45%	2.6	6.0	2.7	0.1	45%
Total	17.5	45.0	22.1	4.6	49%	22.7	45.0	16.5	-6.2	37%
Operating income(loss)	-0.3	0.5	1.8	2.1	360%					

(Unit : Billions of yen)



Order received, net sales and operating income are forecast to remain at the high levels attained in the preceding year

(Unit : Billions of yen)

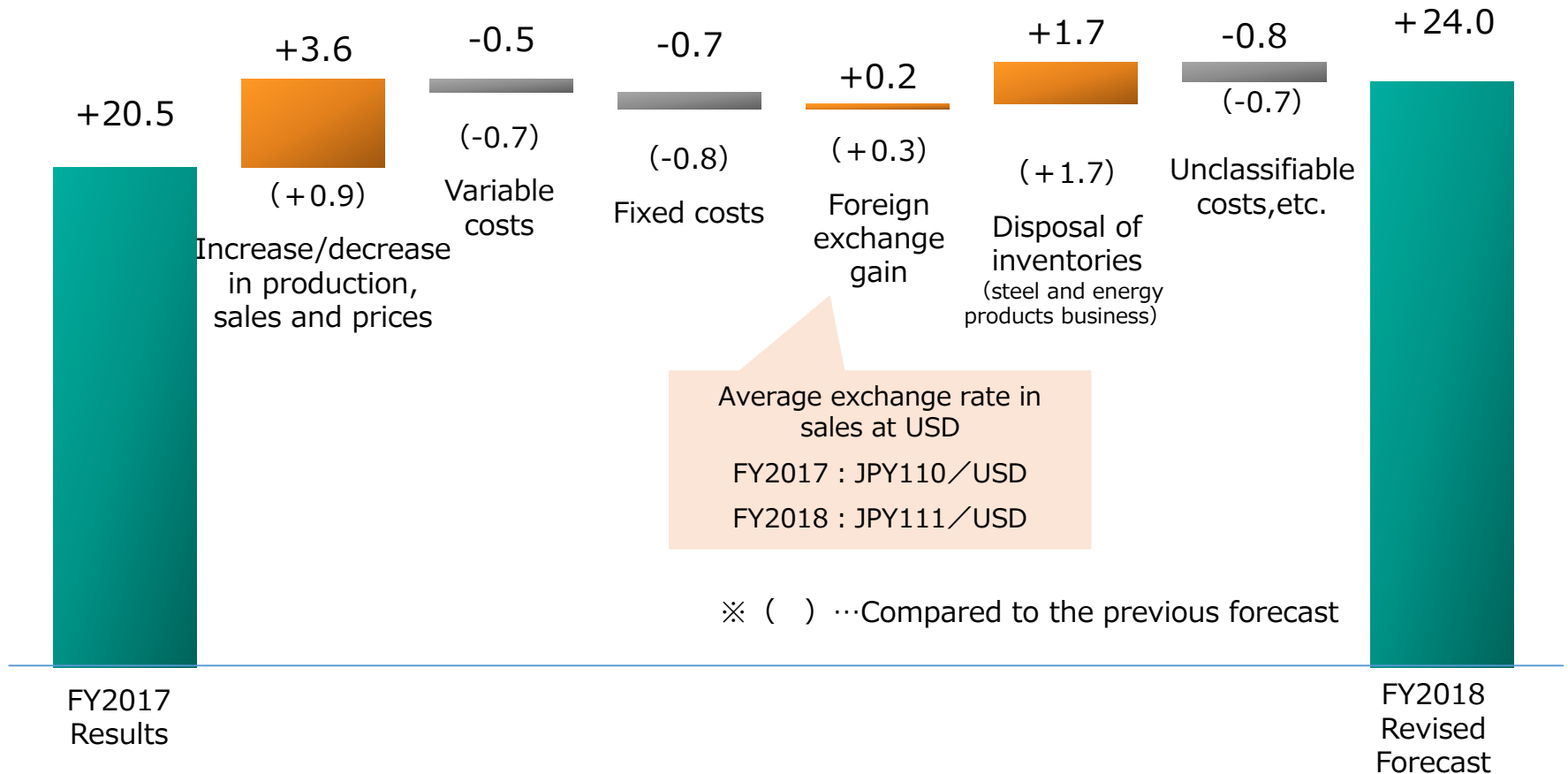
	FY2017 Results (A)	FY2018 revised forecast			vs FY2017 (B) - (A)
		1H	2H	Full year (B)	
Orders received	235.0	123.7	106.3	230.0	-5.0

Net sales	211.7	109.6	117.4	227.0	15.3
Operating income (ratio)	20.5 9.7%	12.3 11.2%	11.7 10.0%	24.0 10.6%	3.5 0.9%
Ordinary income	22.1	13.6	11.4	25.0	2.9
Profit(Loss)	10.7	11.9	8.1	20.0	9.3
Profit(Loss) per share(yen)	145.77	162.52	109.63	272.15	126.38

Dividends per share(yen)	37.5	25	25	50	12.5
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Operating income is expected to increase by 17% year on year due to increased production and sales

(Unit : Billions of yen)



## Segment for FY2018

The Industrial Machinery Products Business will continue to achieve high performance, driving profit and the Steel and Energy Products Business will attain profitability

### Industrial Machinery Products Business

(Unit : Billions of yen)

	FY2017 Results (A)	FY2018 Revised forecast (B)	vs FY2017 (B) - (A)
Orders received	185.5	180.0	-5.5
Net sales	168.9	177.0	8.1
Operating income (ratio)	23.7 14.0%	24.2 13.7%	0.5 -0.3%

### Steel and Energy Products Business

	FY2017 Results (A)	FY2018 Revised forecast (B)	vs FY2017 (B) - (A)
Orders received	43.0	45.0	2.0
Net sales	36.3	45.0	8.7
Operating income (ratio)	-0.9 -2.5%	2.2 4.9%	3.1 7.4%

Sales of plastic production and processing machinery will compensate for the decline in sales of defense equipment.

(Unit : Billions of yen)

	Net sales, Operating income			Orders received		
	FY2017 Results (A)	FY2018 Revised forecast (B)	vs FY2017 (B) - (A)	FY2017 Results (C)	FY2018 Revised forecast (D)	vs FY2017 (D) - (C)
Plastic production and processing machinery	50.2	63.0	12.8	63.8	63.0	-0.8
Molding Machines (consolidated)	64.5	69.0	4.5	72.4	71.0	-1.4
FPD system (consolidated)	15.1	15.0	-0.1	14.2	14.0	-0.2
Other	28.4	19.0	-9.4	22.9	21.0	-1.9
Consolidated group companies, etc.	10.7	11.0	0.3	12.2	11.0	-1.2
Total	168.9	177.0	8.1	185.5	180.0	-5.5
Operating income	23.7	24.2	0.5			

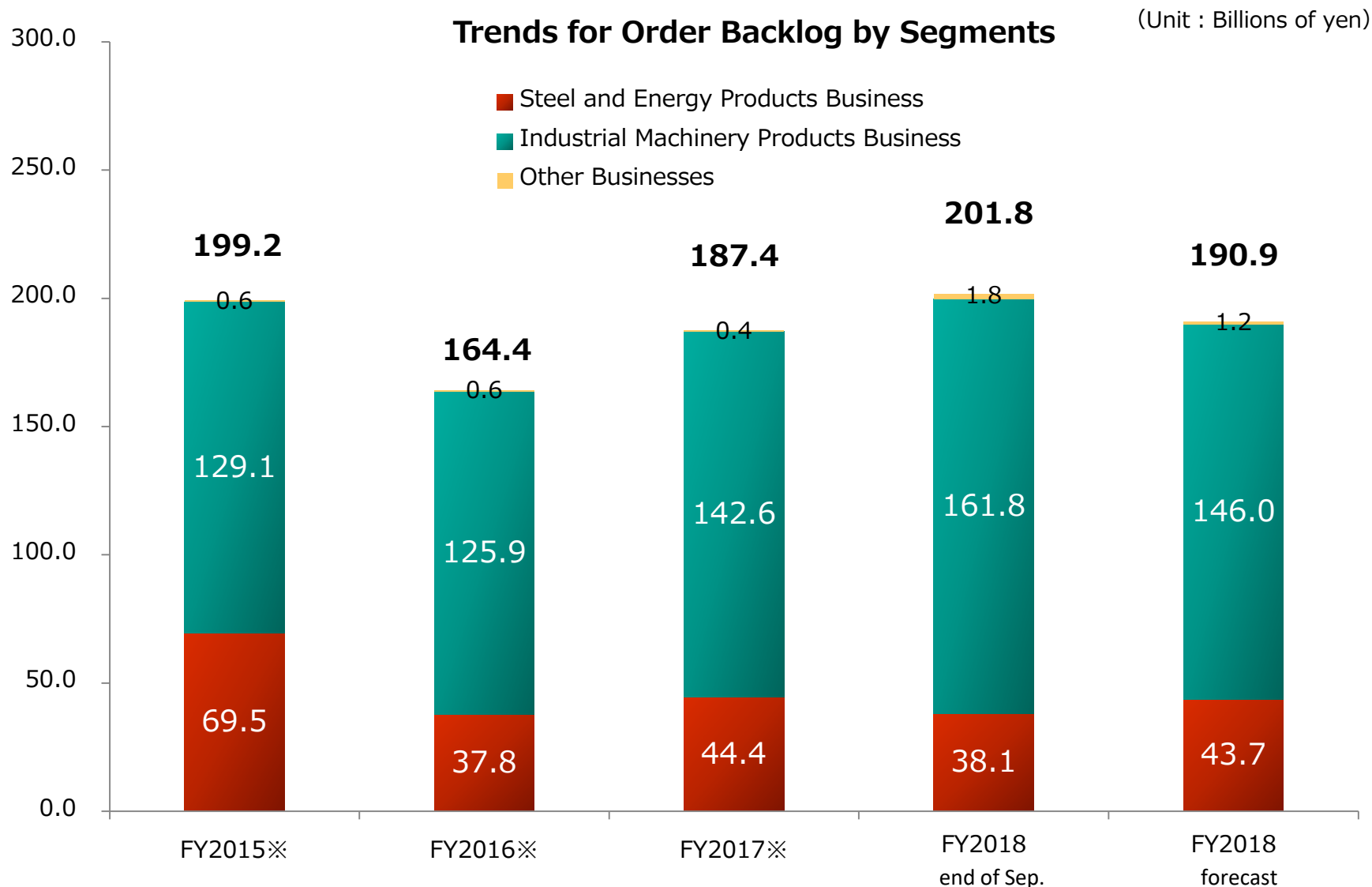
Net sales ,operating income and orders received are expected to increase year on year due to increased sales in clad steel pipes.

(Unit : Billions of yen)

	Net sales, Operating income			Orders received		
	FY2017 Results (A)	FY2018 Revised forecast (B)	vs FY2017 (B) - (A)	FY2017 Results (C)	FY2018 Forecast※ (D)	vs FY2017 (D) - (C)
Electric and nuclear power	17.2	14.0	-3.2	13.0	15.0	2.0
Clad steel plates and pipes	7.0	15.0	8.0	13.9	15.0	1.1
Other	6.2	10.0	3.8	10.3	9.0	-1.3
Consolidated group companies, etc.	5.9	6.0	0.1	5.8	6.0	0.2
Total	36.3	45.0	8.7	43.0	45.0	2.0
Operating income	-0.9	2.2	3.1			

※ Forecast of orders received isn't revised from the beginning of the fiscal year





※Except FY2018,the above figures were based on before modified classifications.



# MEDIUM-TERM MANAGEMENT PLAN “JGP2020”

Progress report



## JGP2020

### Building foundations for new growth

Building foundations to ensure the unfailing growth of the JSW Group for the next ten years

FY2030

- Industrial Machinery Products Business
- Steel and Energy Products Business

~JGP2017

JGP2020

Toward a stable business portfolio

New business, M&A

Expand business scale

Foster new business

Expand existing business

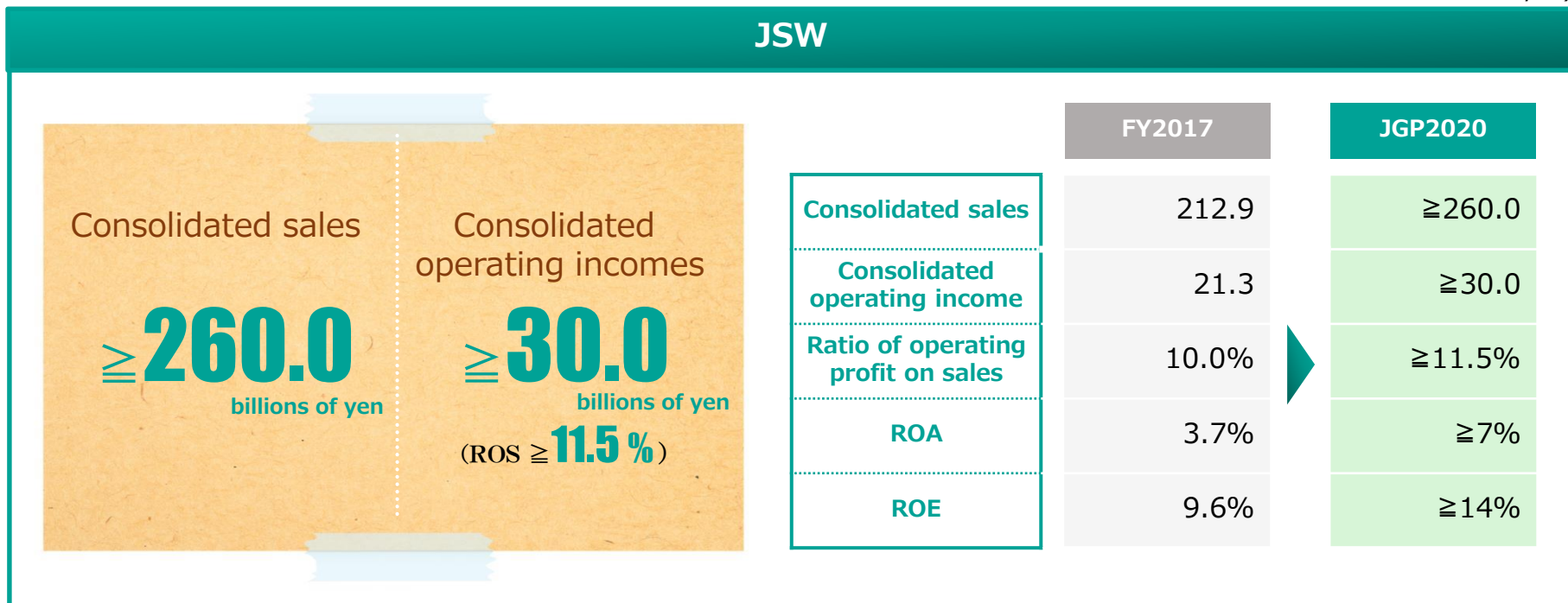
『Aggressive management』  
Sowing and nurturing seeds for expanding business domains

Promotion of restructuring of production system

Attaining stable profitability with the current business scale  
Discovering and developing opportunities for growth

Firmly maintaining existing businesses

(Unit : Billions of yen)



## Industrial Machinery Products Business

	FY2017	JGP2020
Consolidated sales	170.2	≥205.0
Operating income	23.8	≥28.0
Ratio of operating profit on sales	13.9%	≥13.6%

## Steel and Energy Products Business

	FY2017	JGP2020
Consolidated sales	40.8	≥45.0
Operating income	-1.5	≥3.0
Ratio of operating profit on sales	-3.7%	≥6.6%

## JGP2020 ~Lay foundations looking ahead to 2030~

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### ◆ “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 cost structure in 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

Explore new businesses with an eye on megatrends

Foster and develop business in four areas(aircraft components,hydrogen, crystal device and thin films) and an additional segment

## ① Steel and Energy Products Business

### Topics

## ● Reconstruction of Steel and Energy Products Business

### Key measures

#### ● Commencement of a study on the establishment of a new company and the integration of affiliated companies

[Purpose of the study]

- Reorganization to create a structure that matches the business scale and establishment of a consistently profitable operation structure through the acceleration of the profitability improvement reform.

⇒ The study is underway for establishment in October 2019.

#### ● Collaboration in manufacturing field with Tsukishima Kikai Co.,Ltd

- Collaboration in the manufacture of steel infrastructure equipment. The project is underway according to the plan for the commencement of operation in April 2019.

#### ● Strengthening of the competitiveness of clad steel plates and pipes

- Strengthening of cost competitiveness through the rationalization and consolidation of facilities

⇒ Improve profitability by improving production costs and enhancing productivity.

Strengthen revenue bases  
by reestablishing  
the business portfolio



Rebirth in Steel and Energy  
Products Business

## ① Steel and Energy Products Business

### Topics

- Strengthen competitiveness of clad steel plates and clad steel pipes
  - Investment plan for cost improvements -

### <Future market trends and outlook>

- ▶ Clad steel plates/main applications: 60% for parts for varieties of types of oil/gas related equipment
- ▶ Clad steel pipes/main applications: Corrosion-resistant pipes for transportation from oil/gas fields
  - Demand for energies (LNG) expanded due to a population increase
  - ⇒ The production capacity of LNG will not cover demand after 2020. There will be progress in development mainly in Asia and the Middle East.

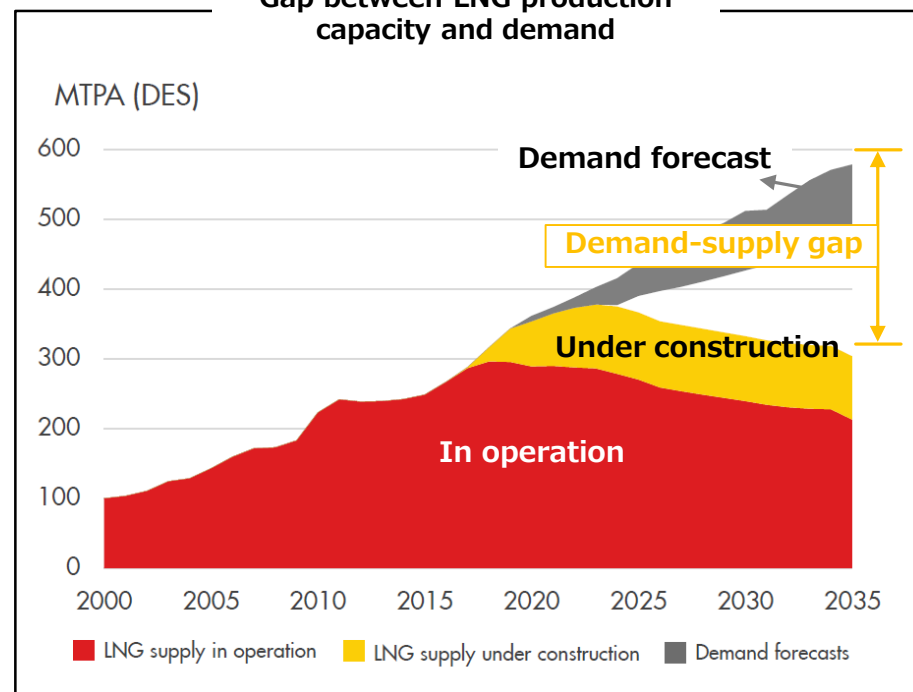
Capital investment will be gradually increased during the period from 2018 to 2021. (Mainly for a rolling shop)



### Improvement plan

Productivity improvement of **30%**  
 Production cost reductions of more than **20%**  
 → Creation of an operation structure resistant to load variations

Gap between LNG production capacity and demand

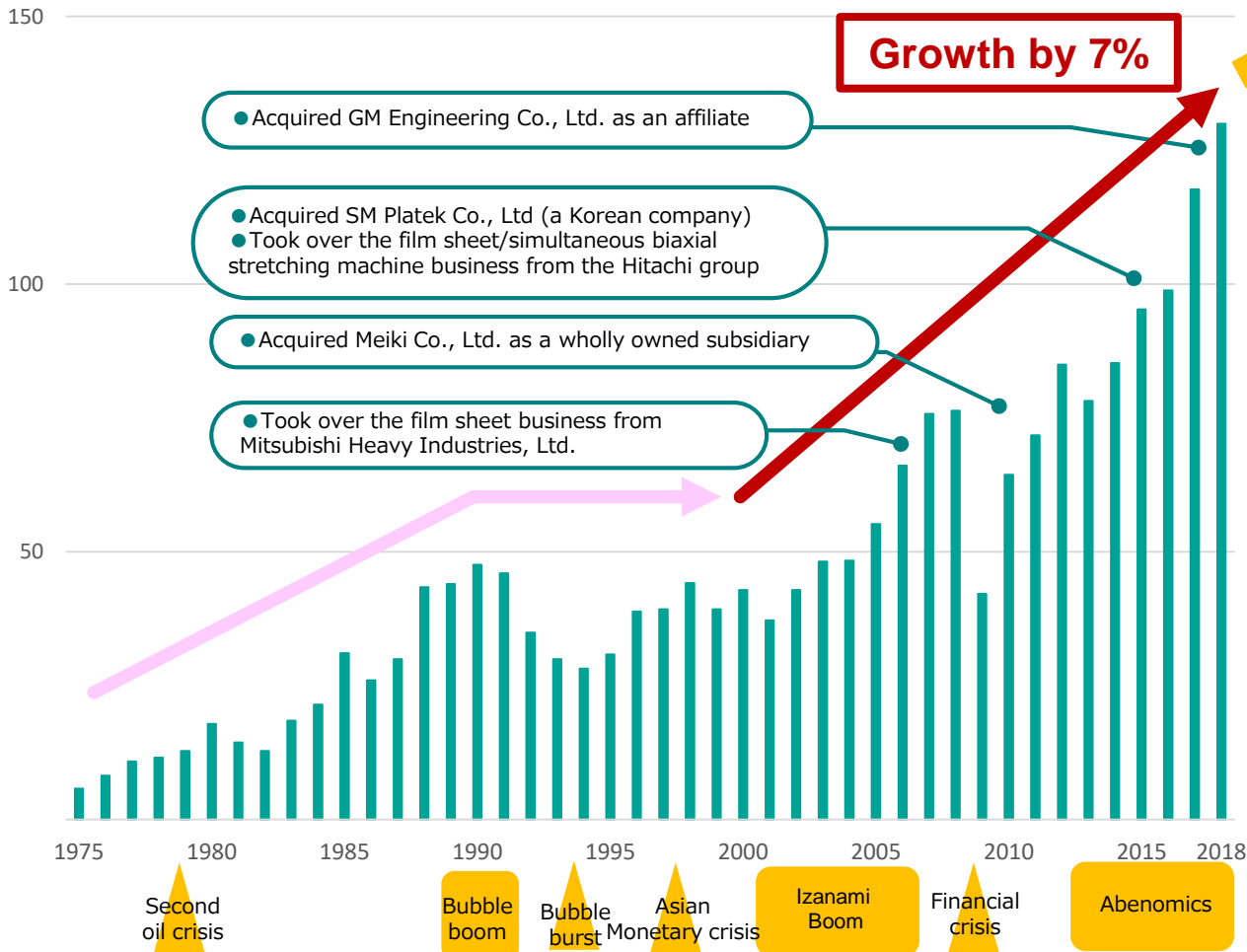


Source: Shell interpretation of IHS Markit, Wood Mackenzie, FGE, BNEF and Poten & Partners Q4 2017 data

# Expansion of Business Scale of Plastic Processing Machines

- The global plastics market is forecast to grow 2% to 3% overall every year, like GDP.
- The Company's plastics-related businesses grew threefold from the level in 2000.

(Billions of yen)

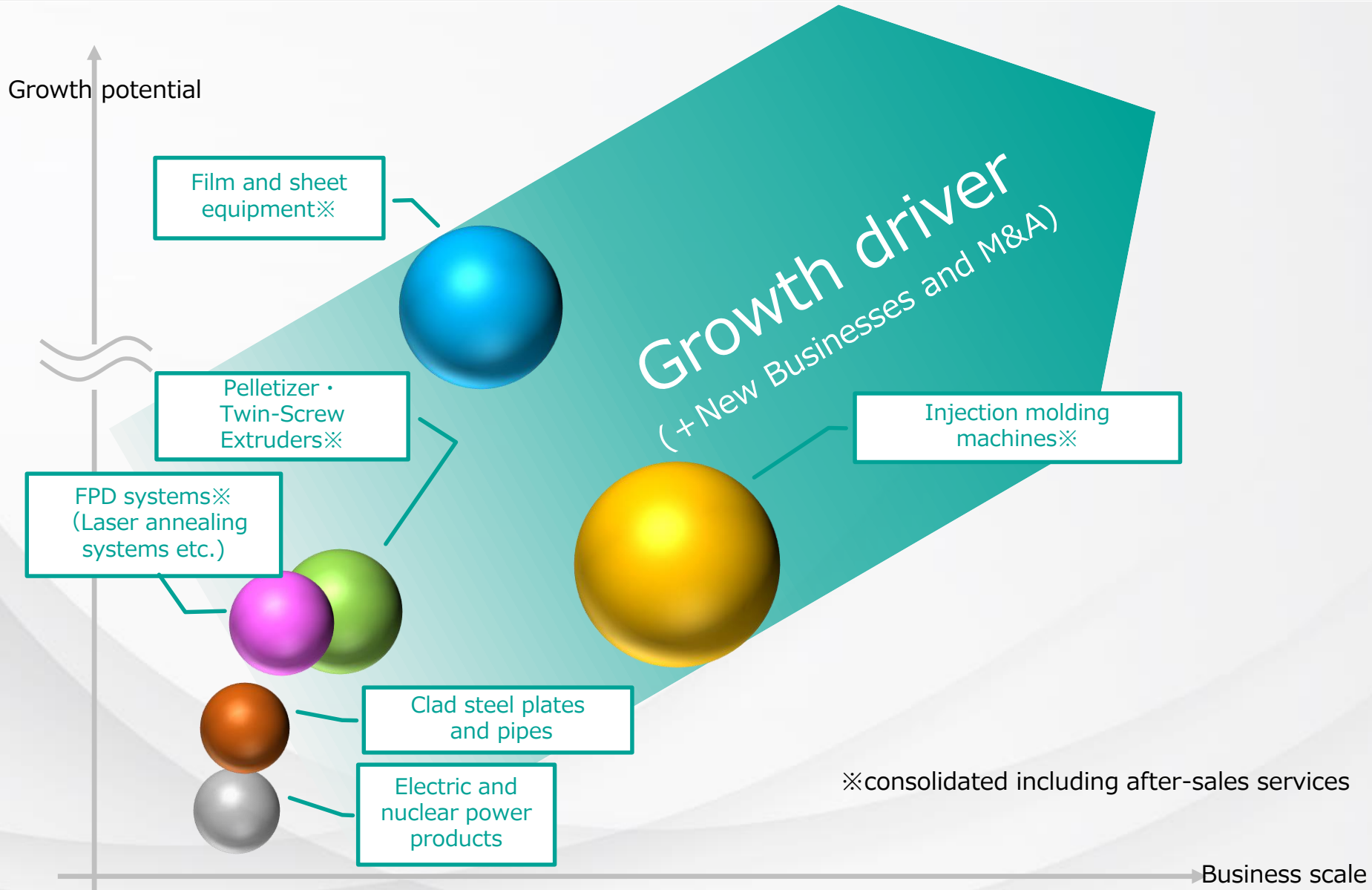


Aim to achieve further growth

- Sales strategy to speedily tap into areas in which high growth is expected or new businesses will be created.
- Strengthen after-sales services
- Actively M&A and alliance



# Business scale and growth potential by each products



## ② Enhancement of capacity of Hiroshima Plant

### Topics

- Commencement of operation at No. 6 & No. 7 assembling plants, an injection machine service parts center and a complex welfare building (construction completed in October 2018)

Establishment of a structure to increase production with an eye on strong demand for industrial equipment

- **Production of varieties of types of industrial equipment**
- **Expansion of the injection molding machine service business**

Production capacity in Hiroshima plant

Improvement of over 15%  
Operation started from November on an as-needed basis.



## ③ Film and Sheet equipment

### Topics

- Demand trends and outlook for separator films for lithium-ion batteries (China, Others)

The market for separators is expected to expand by more than 30% every year, despite a slowdown in China.



Source: Current status of LiB parts and future outlook in 2018 – Separators by Yano Research Institute Ltd

#### ◆ Chinese market 🌏

- \* Separator films continued to be oversupplied because production facilities became operative at the same time in 2016 and 2017.
- \* Industry consolidation will continue for the time being. (Rationalization of the number of manufacturers, which is too high)
- \* The market is expected to recover around 2019 or 2020.

#### ◆ Markets other than China (Japan, Korea and Europe) 🌞

- \* Large capital investments will be planned and made in anticipation of the full-scale popularization of EV after 2020.

With an eye on an increase in demand, JSW will

- expand facilities according to the plan to address an increase in production, and
- create more competitive products by stepping up efforts in the development of new technologies.

## ④ Injection Molding Machines

### Solution products based on a mass-customization strategy

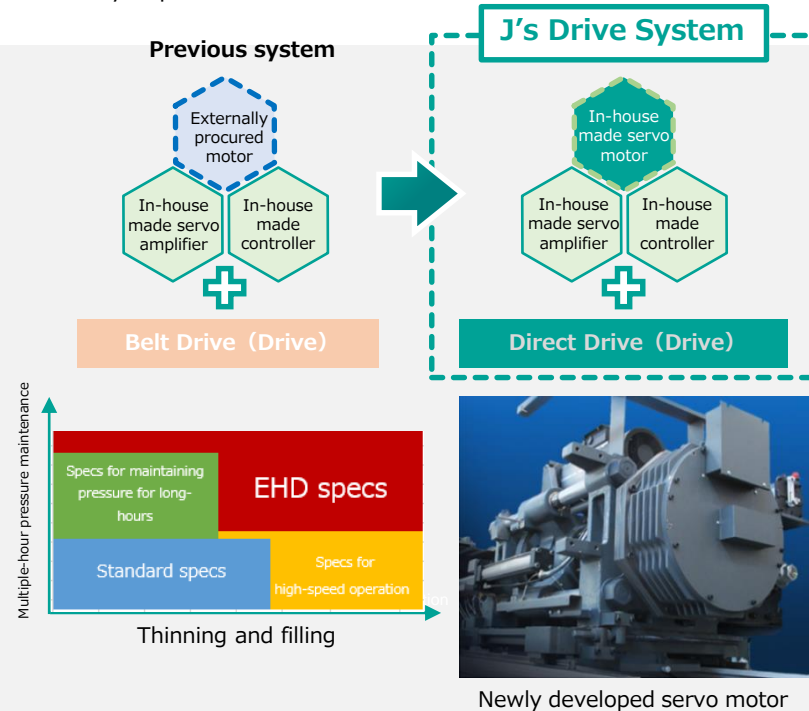
#### Topics

- Commencement of sales of machines equipped with J's Drive System™
- Magnesium alloy injection machines: Development of large-sized equipment with a clamp capacity of 1,300 tons

#### ● J's Drive System™

##### Succeeded in the in-house development of a high-performance servo motor

High-speed and high-load injection, a process that had basically been carried out separately, was made possible with one machine (based on the EHD specs). Through this technology, JSW succeeded in developing an injection molding machine that can be used for molding a wide variety of products.



#### ● Magnesium Alloy Injection Molding Machine

Given the tendency of making vehicles lighter, applications and demand are expected to expand, replacing metal parts.

Currently 280 to 850 tons →  
Development of a machine with 1,300-ton clamp capacity.  
(After January 2019)

- ▶ Addressing requirements for large-sized components such as different types of metal parts for instrument panels.
- ▶ Considering the development of machines with a clamp capacity of 2,000 to 3,000 tons in the future.

⇒ Entering the automobile industry in earnest



Magnesium Alloy Injection Molding Machine with a 850-ton clamp capacity <JLM850MG2e>

## JSW IoT Solution

～Example: Conversion of a molding plant into a smart factory～

**[NET100]**  
Production management and analysis  
Management and monitoring of operations



**[Production Manager]**  
Management of information on molding processes  
Automated preparation of management reports

**[Molding conditions support software]**  
Calculation of molding processes and initial molding conditions and guidance on countermeasures for defective molding  
**<SYSCOM5000i preinstalled>**



**[AI Molding Navigator]**  
Prevention of defective molding



**J-Wise™** : JSW Worldwide IoT Solutions of Enhancement

**[Remote Maintenance]**  
Reduction of downtime  
Reduction of maintenance costs

**[Predictive maintenance of ball screws]**  
Maintenance timing is informed based on the number of shots and load levels.  
**<SYSCOM5000i preinstalled>**



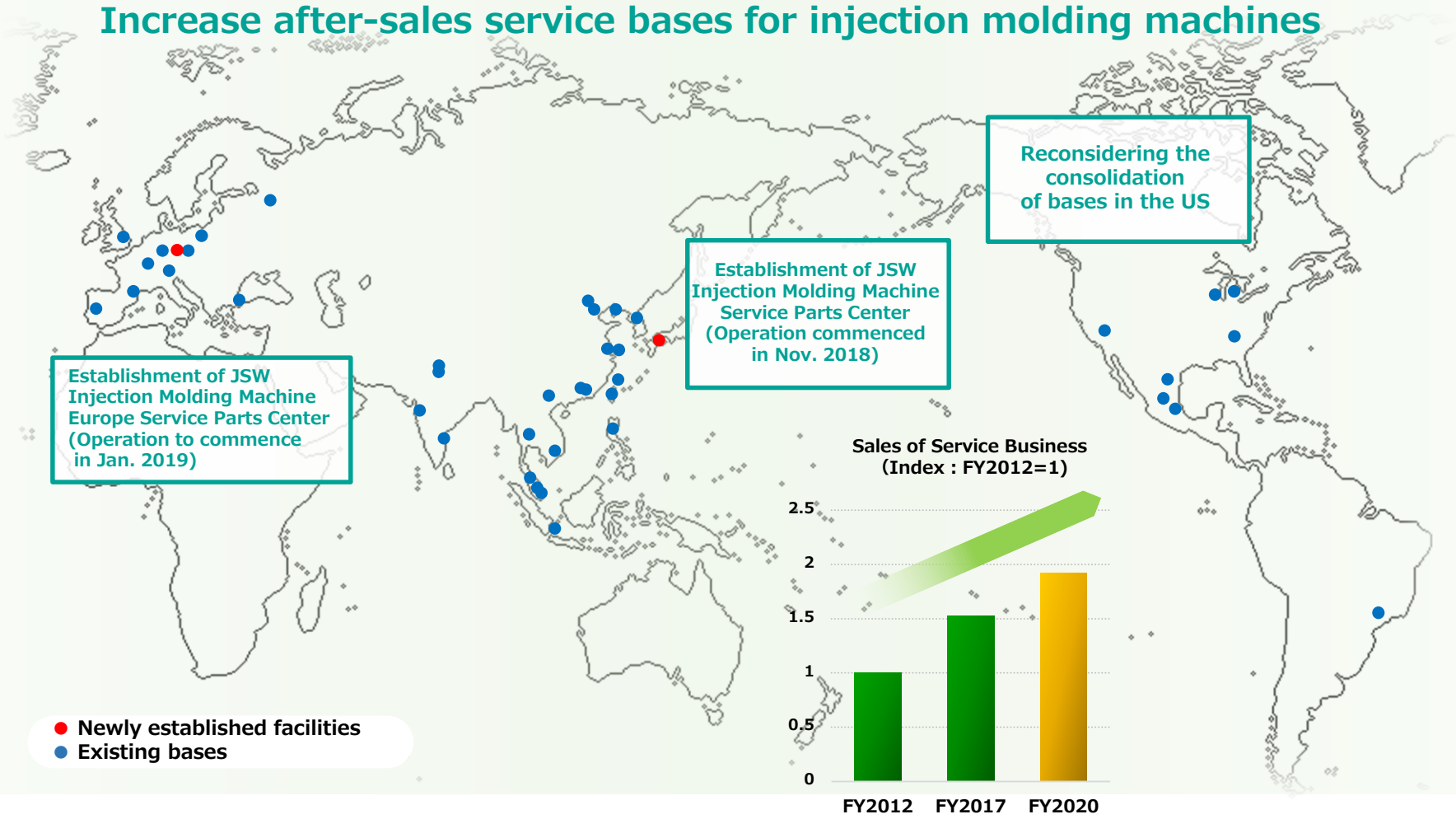
**[Predictive Maintenance]**  
The life of ball screws is predicted  
Reduction of downtime

**[Team Network]**  
Labor-saving through collaboration of molding machines and peripheral devices

Apply to different types of industrial machines

- Strengthen foundations of service structure focusing on Industrial Machinery Products Business  
⇒ Generate stable profit and increase customer satisfaction
- Build strong customer base through service business ⇒ Lay foundations for next businesses

## Increase after-sales service bases for injection molding machines



## – Activities of the New Business Promotion Headquarters –

Search for new business in major trends ⇒

Foster and develop business in four segments(Aircraft, Hydrogen, Crystal, Thin films) and additional segment

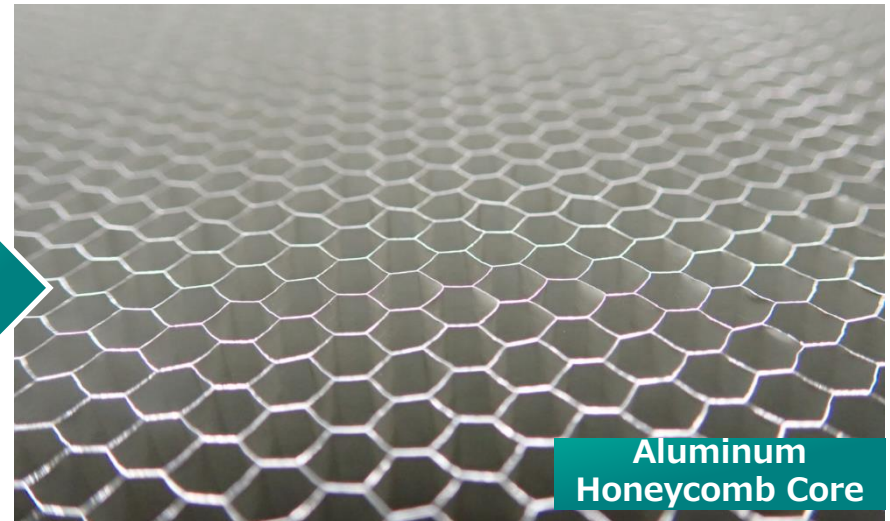
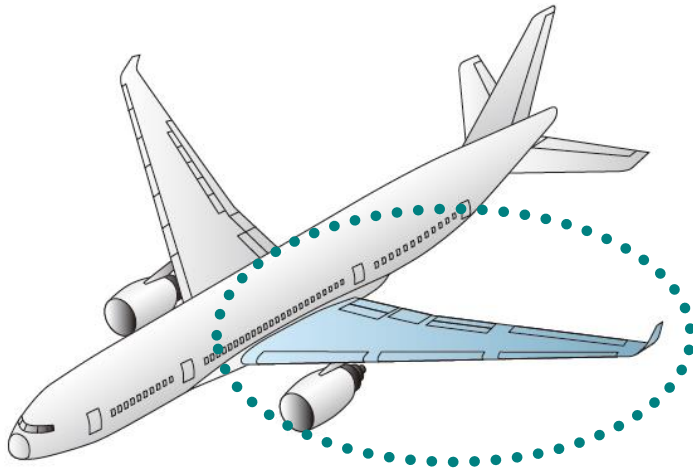
### ▶ **Advanced Materials Business Promotion Office (Since Oct.1,2018)**

Drive efforts to develop businesses for functional materials such as CFRP and powder alloy, manufacturing equipment of functional materials and systems.

### ▶ **Aircraft Business Promotion Office**

Acquired JIS Q 9100 : 2016, a certificate of approval for quality management systems for aviation, space and defense (acquisition date: Oct.12, 2018).

Scope : Honeycomb core processing of aircrafts' moving surfaces



– Activities of the New Business Promotion Headquarters –

## ▶ Hydrogen Business Promotion Office

○ For Hydrogen Station※ : Steel Pressure Vessel for Hydrogen Storage



Hydrogen Station



Steel Pressure Vessel for Hydrogen Storage

### ▶ JSW's features:

- Steel pressure vessel featuring the longest life and a low cost
- Domestic market share of 75% in 2018



Development of a steel pressure vessel featuring a lower cost and life is underway.

Sales will start within FY2018.



Pressure vessel under development

### FCVと水素ステーションの普及に向けたシナリオ



Source: A scenario for the penetration of FCV and hydrogen stations  
Fuel Cell Commercialization Conference of Japan (Mar. 11, 2016)

**Expecting to expand businesses on the back of the popularization of fuel cell vehicles (FCV).**

※ Hydrogen station is a facility to supply hydrogen to fuel cell vehicles



## Topics

- Plastic Recycling - Past results and initiatives for the future -

1995      2000      2005      2010      2015      2018      2025

## Recycle

Biodegradable plastic    Conversion of waste plastics to fuel  
 PET bottle recycling      Used paper recycling



Compounding twin-screw extruders



Injection Molding Machine



Film and Sheet Machine



Micro cellular foam injection molding machine

Micro cellular foam extruder,  
 Molding machine,  
 Bio plastic machine  
 Manufacturing facilities of thin films

## Emission Reduction

Challenges for the future  
 ~Product development for low environmental loads~

- Development of technologies for replacements for plastics
- Development of technologies to improve product properties with nanocomposite materials



Magnesium Alloy Injection Molding Machine



# 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

速さは競争の要であるが、  
 単なる速さだけでは、  
 本当の速さは出せない。  
 1の100倍の未来を変える。

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 日本製鋼所



# 柔

ゴールを越える速さのほかに、  
 決して止まらない、  
 減りから回復する人の強さだ。  
 ものづくりの未来を変える。

**JSW**  
 THE JAPAN STEEL WORKS, LTD.  
 日本製鋼所



# 超

高みを越えしめるほど  
 さらに上を目指さなくてはならない。  
 想像するスケールを越えていく。  
 ものづくりの未来を変える。

**JSW**  
 THE JAPAN STEEL WORKS, LTD.  
 日本製鋼所



# 攻

けを獲るだけでなく、  
 新しい壁は倒さない。  
 攻め続けることが、やがて時代を動かす。  
 ものづくりの未来を変える。

**JSW**  
 THE JAPAN STEEL WORKS, LTD.  
 日本製鋼所

A hand with a finger pointing towards a circular button. The button has the text 'FUTURE' above a horizontal line and 'START' below it. The background is dark and textured.

FUTURE  
START

**JSW** 日本製鋼所



# REFERENCE



## Industrial Machinery Products Business

Former disclosure categories(~FY2017)	New disclosure categories(FY2018~)
Plastic production and processing machinery	Plastic production and processing machinery
Molding machines(consolidated)	Molding machines(consolidated)
Other	FPD equipment (consolidated) ※
Consolidated group companies ,etc.	Other
	Consolidated group companies,etc.

※FPD (Flat Panel Display) equipment(consolidated) :  
Laser annealing systems+Laser applications+Related services

Products,affiliated companies	Disclosure categories former⇒new
Laser annealing system (including applications)	Other ⇒FPD equipment(consolidated)
JSW IT Service Co.	Affiliated companies⇒FPD equipment (consolidated)
1 affiliated company	Consolidated group companies ⇒Other Business

## Steel and Energy Products Business

Former disclosure categories(~FY2017)	New disclosure categories(FY2018~)
Electric and nuclear power	Electric and nuclear power
Pressure vessels for oil refineries	Clad steel plates and pipes
Clad steel plates and pipes	Other
Wind turbines	Consolidated group companies,etc.
Other	
Consolidated group companies ,etc.	

Products,related companies	Disclosure categories former⇒new
Pressure vessels for oil refineries	Pressure vessels for oil refineries⇒Other
Wind turbines	Wind turbines⇒Other Business
3 affiliated companies	Consolidated group companies ⇒Other Business

## Other Business

Former disclosure categories(~FY2017)	New disclosure categories(FY2018~)
Real estate and Other business	Other Business (Real estate will be non-operating )

# Trend of Net sales, Operating Income and Profit

※From FY2018, based on modified disclosure classifications

※Before FY2018, "Other Businesses" includes real estate

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	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018 (forecast)
Net Sales	220.6	188.7	194.6	223.3	212.4	212.9	227.0
Industrial Machinery Products Business	130.1	118.3	126.3	144.3	159.3	170.2	177.0
Plastic production and processing machinery	37.0	28.3	32.5	36.4	36.1	50.2	63.0
Molding machines(consolidated)	40.9	47.0	53.6	56.4	57.6	64.5	69.0
FPD equipment (consolidated)	-	-	-	-	-	-	15.0
Other	37.7	31.8	25.0	32.6	46.8	37.0	19.0
Consolidated group companies, etc.	14.5	11.2	15.2	18.9	18.8	18.5	11.0
Steel and Energy Products Business	88.2	67.6	66.2	74.8	51.2	40.8	45.0
Electric and nuclear power	37.4	22.6	27.4	19.2	19.3	17.2	14.0
Pressure vessels for oil refineries	4.3	4.1	4.2	1.4	1.7	1.0	-
Clad steel plates and pipes	29.3	26.7	16.2	39.3	13.5	7.0	15.0
Wind turbines	1.1	1.7	5.7	1.2	3.9	1.6	-
Other	12.3	7.2	7.0	6.9	5.3	5.5	10.0
Consolidated group companies, etc.	3.8	5.3	5.7	6.8	7.5	8.5	6.0
Other Businesses	2.2	2.7	2.0	4.0	1.8	1.7	5.0
Operating Income	16.6	8.8	7.5	14.4	12.3	21.3	24.0
Industrial Machinery Products Business	16.7	12.1	11.3	12.4	15.1	23.8	24.2
Steel and Energy Products Business	-0.5	-3.6	-3.9	0.7	-2.8	-1.5	2.2
Other Businesses	0.8	1.1	0.9	2.0	0.9	0.8	0.2
Profit	8.2	5.5	-5.3	-16.6	-4.9	10.7	20.0

	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018 (forecast)
Total assets	303.9	293.1	319.6	293.1	275.3	297.4	307.5
Industrial Machinery Products Business	96.8	99.3	108.4	124.3	123.7	128.1	-
Steel and Energy Products Business	120.2	111.5	111.4	60.2	37.5	40.3	-
Other Businesses	13.3	12.9	13.0	12.0	11.8	11.7	-
Net assets	134.3	139.2	138.2	111.3	107.5	118.6	128.1
Net assets per share(JPY) ※Since FY2016, amount is after reserve split of stocks	359.29	372.83	368.81	299.41	1,446.44	1,592.47	1,726.15
Equity ratio (%)	43.83	47.09	42.72	37.53	38.6	39.3	41.3
ROE (%)	6.35	4.07	-3.88	-13.46	△4.6	9.6	-
Operating cash flow	23.7	11.5	11.5	19.7	12.0	26.7	7.3
Investing cash flow	-5.8	-5.7	-2.6	-12.1	-13.5	-5.0	2.4
Financial cash flow	-15.2	-15.0	-2.9	4.7	-1.2	-2.4	-1.8
Cash and cash equivalents at end of period	50.9	42.2	49.1	61.4	58.6	77.8	85.8

(revised on April 1, 2018)

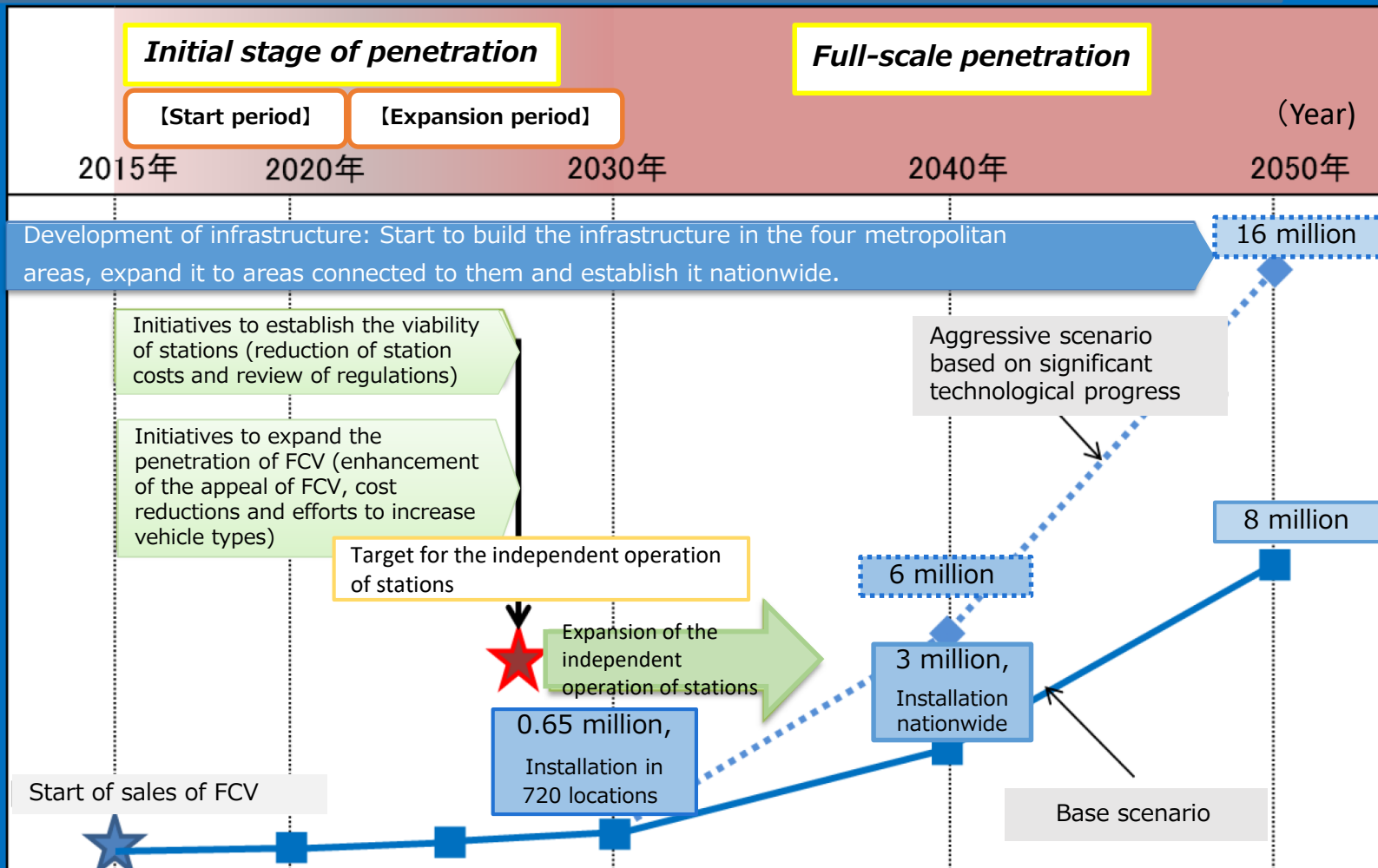
At The Japan Steel Works, Ltd., we will comply with all laws and international rules, both to the letter and in spirit, and fulfill our social responsibilities with a strong sense of ethics in Japan and overseas as a company that aims to realize a sustainable society based on the following ten principles.

1. To promote sustainable economic growth and the resolution of social issues, we will develop useful products, technologies and services that give consideration to safety through innovation and provide them to society.
2. We will conduct appropriate transactions and responsible procurement based on fair and free competition. We will also maintain sound relationships with political and government bodies.
3. To enhance our corporate value, we will make appropriate corporate information available to the public willingly and fairly and have constructive dialogues with a wide range of stakeholders.
4. We will respect the human rights of all people.
5. We will earn the trust and satisfaction of society and customers by responding promptly to inquiries from customers after reflecting the market and customer needs in our products, technologies and services.
6. We will provide a sound working environment by developing workstyles that respect the diversity, personality and individuality of employees.
7. We will take actions proactively, recognizing that addressing environmental issues is an important duty for us as a company.
8. We will participate in the community and contribute to its development as a corporate citizen.
9. We will conduct thorough and systematic crisis management against antisocial forces, terrorism, cyberattacks and natural disasters, etc. that will pose a threat to civil society and corporate activities.
10. Recognizing the realization of the spirit of this code of behavior as its own role, our management will make it fully known to the employees of the Company and its affiliates after establishing effective governance and encourage the chains to perform acts based on the spirit of this code of behavior.  
If any situation that will lose the trust of society occurs in conflict with the spirit of this code of behavior, our management will take the initiative in solving the problem, investigating the cause and preventing recurrence to fulfill our responsibility.



# Scenario for the penetration of FCV and hydrogen stations

Number of FCV in use/number of hydrogen stations installed



Source: A scenario for the penetration of FCV and hydrogen stations

Fuel Cell Commercialization Conference of Japan (Mar. 11, 2016) / translated by JSW