



KOBELCO

Fiscal 2017 Financial Results for First Quarter and Forecast for the Full Fiscal year

July 28, 2017
KOBELCO, LTD.





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1. Financial Results for First Quarter of Fiscal 2017



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Financial Results for First Quarter of FY2017

(Billions of yen)

	FY2016	FY2017	Change
	1Q	1Q	FY16→17
Net Sales	404.4	435.0	+ 30.5
Operating Income	12.7	30.3	+ 17.6
Ordinary Income	4.5	28.2	+ 23.6
(Excluding inventory valuation)	(11.0)	(18.2)	(+ 7.2)
Extraordinary Income	-	6.7	+ 6.7
Net Income Attributable to Owners of the Parent	△2.0	25.0	+ 27.0

Segment Sales/Ordinary Income (Loss)

(Billions of yen)

Net Sales	FY2016	FY2017	Change	Ordinary Income	FY2016	FY2017	Change
	1Q	1Q	FY16→ 17		1Q	1Q	FY16→ 17
Iron & Steel	144.2	174.4	+30.2	Iron & Steel	△2.8	13.0	+15.9
Welding	20.6	19.4	△1.1	Welding	1.9	1.1	△0.7
Aluminum & Copper	85.1	88.9	+3.7	Aluminum & Copper	3.0	6.1	+3.0
Machinery	37.9	30.3	△7.6	Machinery	2.0	0.2	△1.8
Engineering	24.3	19.0	△5.3	Engineering	0.6	0.3	△0.3
Construction Machinery	71.4	87.5	+16.0	Construction Machinery	△4.0	3.9	+8.0
Electric Power	17.2	13.9	△3.2	Electric Power	3.8	2.4	△1.3
Other Businesses	14.8	13.3	△1.4	Other Businesses	0.7	1.0	+0.3
Adjustment	△11.4	△ 12.0	△0.5	Adjustment	△0.9	△0.3	+0.5
Total	404.4	435.0	+30.5	Total	4.5	28.2	+23.6



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2. Forecast for Fiscal 2017



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Forecast for FY2017

(Billions of yen)

	FY2016	FY2017 (Previous Forecast)			FY2017 (Current Forecast)			Change ② - ①
	Full year	1H	2H	Full year ①	1H	2H	Full year ②	
Net Sales	1,695.8	930.0	940.0	1,870.0	930.0	950.0	1,880.0	+10.0
Operating Income	9.7	35.0	40.0	75.0	40.0	40.0	80.0	+5.0
Ordinary Income	△19.1	20.0	30.0	50.0	30.0	25.0	55.0	+5.0
(excluding inventory valuation)	(△15.6)	(14.5)	(36.0)	(50.5)	(25.0)	(30.0)	(55.0)	(+4.5)
Extraordinary Income	8.1	-	-	-	6.7	-	6.7	+6.7
Net Income Attributable to Owners of the Parent	△23.0	15.0	15.0	30.0	25.0	10.0	35.0	+5.0



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Net Sales by Segment

(Billions of yen)

Net Sales	FY2016	FY2017 (Previous Forecast)			FY2017 (Current Forecast)			Change ② - ①
	Full year	1H	2H	Full year ①	1H	2H	Full year ②	
Iron & Steel	620.6	355.0	340.0	695.0	360.0	350.0	710.0	+15.0
Welding	82.2	38.0	39.0	77.0	40.0	40.0	80.0	+3.0
Aluminum & Copper	323.3	175.0	170.0	345.0	170.0	175.0	345.0	±0.0
Machinery	150.7	80.0	94.0	174.0	82.0	96.0	178.0	+4.0
Engineering	121.1	54.0	80.0	134.0	54.0	79.0	133.0	△1.0
Construction Machinery	310.4	180.0	155.0	335.0	180.0	155.0	335.0	±0.0
Electric Power	70.6	32.0	39.0	71.0	32.0	37.0	69.0	△2.0
Other Businesses	74.8	33.0	43.0	76.0	30.0	41.0	71.0	△5.0
Adjustment	△58.2	△17.0	△20.0	△37.0	△18.0	△23.0	△41.0	△4.0
Total	1,695.8	930.0	940.0	1,870.0	930.0	950.0	1,880.0	+10.0



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Ordinary Income (Loss) by Segment

(Billions of yen)

Ordinary Income	FY2016	FY2017 (Previous Forecast)			FY2017 (Current Forecast)			Change
	Full year	1H	2H	Full year ①	1H	2H	Full year ②	② - ①
Iron & Steel	△29.5	10.0	5.0	15.0	11.0	4.0	15.0	±0.0
Welding	6.8	2.0	3.0	5.0	2.5	2.5	5.0	±0.0
Aluminum & Copper	12.0	8.0	7.0	15.0	7.5	6.5	14.0	△1.0
Machinery	5.8	1.0	4.0	5.0	1.0	4.0	5.0	±0.0
Engineering	2.8	△1.5	4.5	3.0	△ 1.0	5.0	4.0	+1.0
Construction Machinery	△31.3	6.5	2.5	9.0	7.0	3.0	10.0	+1.0
Electric Power	13.0	0.0	3.0	3.0	2.0	2.0	4.0	+1.0
Other Businesses	7.6	1.5	3.5	5.0	1.5	4.5	6.0	+1.0
Adjustment	△6.4	△7.5	△2.5	△10.0	△ 1.5	△ 6.5	△ 8.0	+2.0
Total	△19.1	20.0	30.0	50.0	30.0	25.0	55.0	+5.0



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【Iron & Steel】

(Billions of yen)

	FY2016	FY2017 (Previous Forecast)			FY2017 (Current Forecast)			Change
	Full Year	1H	2H	Full Year ①	1H	2H	Full Year ②	② - ①
Net Sales	620.6	355.0	340.0	695.0	360.0	350.0	710.0	+15.0
Ordinary Income	△29.5	10.0	5.0	15.0	11.0	4.0	15.0	±0.0
(Inventory Valuation)	(2.0)	(4.5)	(△6.5)	(△2.0)	(3.5)	(△5.5)	(△2.0)	(±0.0)

FY2017

- The forecast for the sales volume of steel products and margins are generally similar to the previous forecast.
- This segment is anticipated to return to profitability as it will no longer be affected by the relining of a blast furnace at Kakogawa Works. Consolidation of upstream operations and cost reductions, including additional measures to improve profitability, will be completed as planned.



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【Iron & Steel】 Strengthening Profitability

(In billions of yen)

FY16⇒FY17: Main factors of cost changes

Relining of a blast furnace	+12.0
Consolidation of upstream operations	+ 6.5
Additional measures to improve profitability	+11.0
Others	△ 4.5

Total +25.0

Consolidation of upstream operations

(Impact from improved profitability + 15 billion yen/year)

Start-up of related equipment is progressing as planned. Consolidation will be completed this Nov.

FY2017 **+ 6.5** (forecast)

FY2018 + 15.0 (plan)

※Comparison with FY2015

Additional measures to improve profitability

(Impact from improved profitability + 30 billion yen/year)

Profitability is steadily improving owing to capital investment, cost cuts at the production level, and improved raw materials cost.

FY2016 **+ 8.5** (actual)

FY2017 + 19.5 (forecast) **+11.0**

FY2020 + 30 (plan)

※Comparison with FY2015

Margin and product mix

Production & shipments	△19.5
Raw material prices	△12.0
Exchange rate changes	+1.0

FY2015

FY2016

FY2017

△14.9

△30.5

Inventory valuation
+16.5

△2.5
Overall costs

Others
+2.0

△29.5

+23.5

Inventory valuation
△4.0

Overall costs reduction
+25.0

15.0

Margin and product mix

Production & shipments	+67.5
Raw material prices	△40.0
Exchange rate changes	△ 4.0

FY15⇒FY16: Main factors of cost changes

Relining of a blast furnace	△12.0	} △16.0
Consolidation of upstream operations	△ 4.0	
Additional measures to improve profitability	+ 8.5	} Total △0.5
Others (subsidiaries, etc.)	+ 7.0	



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【Iron & Steel】 Production & Sales

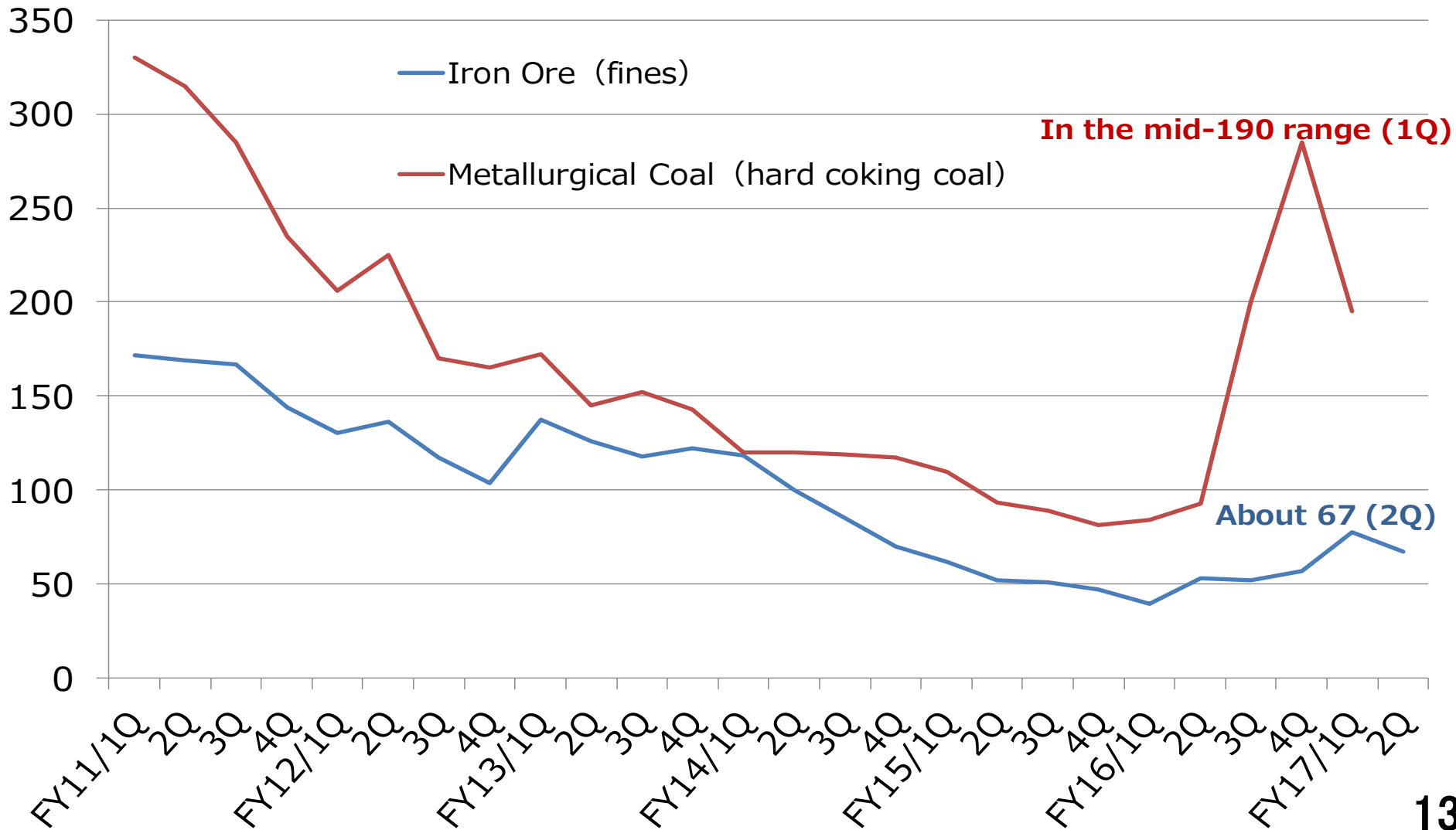
		FY2016 Actual				FY2017	FY2017	
		1Q	1H	2H	Full year	Full year (Current Forecast)	1Q (Actual)	Full year (Previous Forecast)
Domestic crude steel production	(Millions of tons)	26.2	52.6	52.6	105.2		26.2	
<Domestic steel inventory trend>								
Ordinary steel products	(Millions of tons)	5.6	5.6	5.4	--		5.9	end of May.
Rolled sheets	(Millions of tons)	4.0	4.0	3.8	--		4.1	end of May.
<Domestic steel inventory trend>								
Finished auto production	(Millions of cars)	2.1	4.4	5.0	9.4		1.4	Apr. - May.
<KOBELCO STEEL, LTD.>								
Crude steel production	(Millions of tons)	1.9	3.8	3.4	7.2	about7.6	1.9	about7.6
Sales volume	(Millions of tons)	1.4	2.9	3.0	5.9	about6.2	1.5	about6.2
(Domestic)		(1.0)	(2.0)	(2.2)	(4.2)		(1.1)	
(Exports)		(0.5)	(0.9)	(0.8)	(1.7)		(0.4)	
Average steel selling price	(Thousands of yen/ton)	69.0	68.0	73.1	70.6		80.8	
Export ratio (value basis)		29.9%	29.5%	27.7%	28.6%		27.1%	



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Iron Ore & Coking Coal Price Trends

(\$/ton)

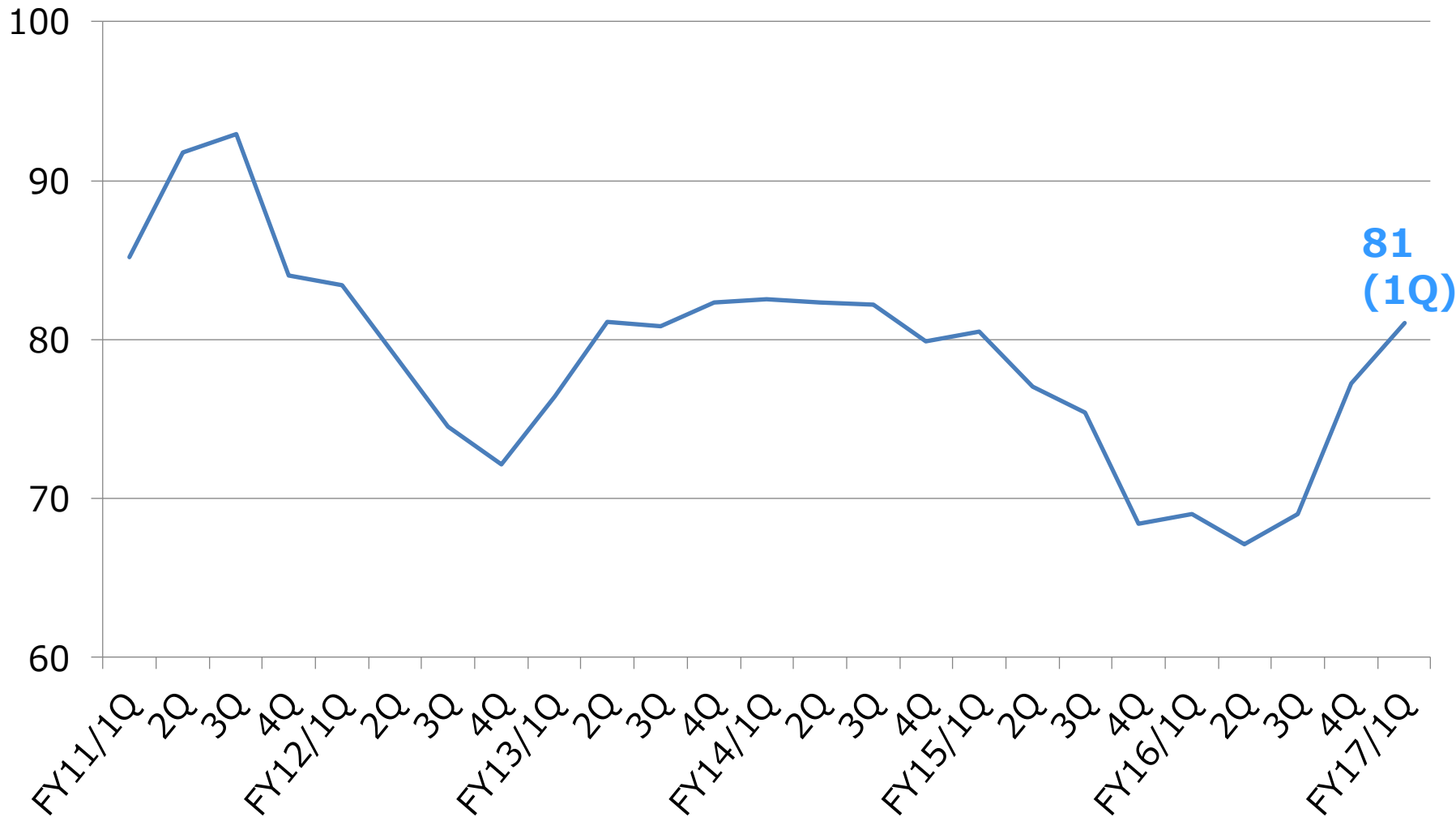




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Steel Product Price Trends at Kobe Steel

(Thousands of yen /ton)





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【Welding】

(Billions of yen)

	FY2016	FY2017 (Previous Forecast)			FY2017 (Current Forecast)			Change
	Full Year	1H	2H	Full Year ①	1H	2H	Full Year ②	② - ①
Net Sales	82.2	38.0	39.0	77.0	40.0	40.0	80.0	+ 3.0
Ordinary Income	6.8	2.0	3.0	5.0	2.5	2.5	5.0	±0.0

<Sales volume of KSL Group>

(Thousands of tons)

	FY2016				FY2017	FY2017	
	1Q	1H	2H	Full year	(Previous Forecast)	1Q	Full Year Forecast
Domestic	30	62	63	125	/	33	/
Overseas	45	89	83	172		40	
Total	75	151	146	297		about290	

FY2017

- Demand for welding materials for use in the overseas shipbuilding sector is on a downward trend as previously forecast.
- Demand for welding systems in the construction sector in Japan is expected to be lower than the previous year.



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【Aluminum & Copper】

(Billions of yen)

	FY2016	FY2017 (Previous Forecast)			FY2017 (Current Forecast)			Change
	Full Year	1H	2H	Full Year ①	1H	2H	Full Year ②	②-①
Net Sales	323.3	175.0	170.0	345.0	170.0	175.0	345.0	±0.0
Ordinary Income	12.0	8.0	7.0	15.0	7.5	6.5	14.0	△1.0
(Inventory Valuation)	△5.5	(1.0)	(0.5)	(1.5)	(1.5)	(0.5)	(2.0)	(+0.5)

<Sales volume of KSL>

(Thousands of tons)

	FY2016				FY2017	FY2017	
	1H	3Q	2H	Full Year	(Previous Forecast)	1Q	Full Year Forecast
Aluminum (Domestic)	80	155	136	291	about295	78	about295
Rolled Products (Exports)	17	31	36	68	about85	22	about85
Copper Rolled Products	37	71	106	143	about143	37	about143

FY2017

- We anticipate that the sales volume of aluminum and copper rolled products will remain firm.
- Ordinary income is anticipated to decline as the sales volume of aluminum forged products in north America is not expected to increase as previously forecast.



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【Machinery】

(Billions of yen)

	FY2016	FY2017 (Previous Forecast)			FY2017 (Current Forecast)			Change
	Full Year	1H	2H	Full Year ①	1H	2H	Full Year ②	② - ①
Net Sales	150.7	80.0	94.0	174.0	82.0	96.0	178.0	+4.0
Ordinary Income	5.8	1.0	4.0	5.0	1.0	4.0	5.0	±0.0
Orders	128.2	—	—	about 140	—	—	about 140	±0.0

FY2017

- We anticipate that the severe business environment will continue due to continuing stagnant demand in the energy-related sector and intensified competition.



ECO WAY

【Engineering】

(Billions of yen)

	FY2016	FY2017 (Previous Forecast)			FY2017 (Current Forecast)			Change
	Full Year	1H	2H	Full Year ①	1H	2H	Full Year ②	② - ①
Net Sales	121.1	54.0	80.0	134.0	54.0	79.0	133.0	△1.0
Ordinary Income	2.8	△1.5	4.5	3.0	△1.0	5.0	4.0	+1.0
Orders	174.2	—	—	about 100	—	—	about 100	±0.0

FY2017

- The business environment is anticipated to be remain severe.
- On the other hand, ordinary income is expected to improve due to cost reduction.



ECO WAY

【Construction Machinery】

(Billions of yen)

	FY2016	FY2017 (Previous Forecast)			FY2017 (Current Forecast)			Change
	Full Year	1H	2H	Full Year ①	1H	2H	Full Year ②	② - ①
Net Sales	310.4	180.0	155.0	335.0	180.0	155.0	335.0	±0.0
Ordinary Income	△31.3	6.5	2.5	9.0	7.0	3.0	10.0	+1.0
(Allowance for Doubtful Accounts in China)	(34.1)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	±0.0

FY2017

- In China, where we are giving priority to receivables collection, we anticipate ordinary income will increase, owing to about a 10% increase in unit sales (in the full fiscal year) and improvement in the product mix, compared with previous forecast.
- An additional posting of an allowance for retained receivables is not expected in fiscal 2017 due to the smooth collection of receivables.



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【Electric Power】

(Billions of yen)

	FY2016	FY2017 (Previous Forecast)			FY2017 (Current Forecast)			Change ② - ①
	Full Year	1H	2H	Full Year ①	1H	2H	Full Year ②	
Net Sales	70.6	32.0	39.0	71.0	32.0	37.0	69.0	△2.0
Ordinary Income	13.0	0.0	3.0	3.0	2.0	2.0	4.0	+1.0

FY2017

- We anticipate that ordinary income will increase following a lag in reflecting fuel cost fluctuation in the unit price of fuel, which we previously estimated to be lower.
- New projects (the Moka Power Plant, the Kobe Power Plant's Nos. 3 & 4) are progressing as planned.



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3. Financial Strategy and Policy on Shareholder Returns



Policy on Shareholder Returns

■ Dividend policy

- ✓ Kobe Steel's basic policy is to provide continuous and stable dividends to its shareholders. Dividends are decided taking into account the Company's financial condition, future capital needs, quarterly business performance and the dividend payout ratio.
- ✓ For the time being, priority will be placed on investments necessary for future growth to improve profitability, raise the overall corporate value of the Group, and thereby improve the common interest of shareholders.

■ Consolidated dividend payout ratio (target)

- ✓ Shall be 15% - 25% for the time being

	FY2013			FY2014			FY2015			FY2016			FY2017 Forecast		
	Interim	Year-end	Year	Interim	Year-end	Year	Interim	Year-end	Year	Interim	Year-end	Year	Interim	Year-end	Year
Dividends per share in yen	-	4.0	4.0	2.0	2.0	4.0	2.0	-	2.0	-	-	-	10.0	Undetermined	
Dividend per net assets			17.7%			16.8%			-			-			



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4. Reference



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Cash Flows

(Billions of yen)

	FY2016	FY2017 (Previous Forecast)			FY2017 (Current Forecast)			Change ② - ①
	Full year	1H	2H	Full year ①	1H	2H	Full year ②	
Cash Flows from Operating Activities	126.7	125.0	50.0	175.0	140.0	35.0	175.0	±0.0
Cash Flows from Investing Activities	△131.9	△140.0	△65.0	△205.0	△ 115.0	△ 80.0	△ 195.0	+10.0
Free Cash Flow (Excluding Project Financing)	△5.2	△15.0	△15.0	△30.0	25.0	△ 45.0	△ 20.0	+10.0
Free Cash Flow	3.9	△15.0	△20.0	△35.0	25.0	△ 50.0	△ 25.0	+10.0
Cash and Deposits (Excluding Project Financing)	*1 197.0	155.0	65.0		190.0	65.0		±0.0

*1 : Early procurement of borrowings for FY 2017 (117.6 billion yen) are included



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Capital Investment

(Billions of yen)

	FY2014	FY2015	FY2016	FY2017 (Forecast)
Capital Investment (Accrual Basis)	103.5	109.9	160.2	135.0
Ratio of Depreciation	115%	116%	167%	129%
Capital Investment (Payment Basis)	95.3	99.1	138.9	150.0
Ratio of Depreciation	106%	105%	144%	143%
Depreciation	89.8	94.8	96.2	105.0



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Financial Indices

	FY2014	FY2015	FY2016	FY2017
ROS (※1)	5.4%	1.6%	△1.1%	2.9%
Net Income per share (※2)	238.19 yen	△59.34 yen	△63.54 yen	96.61 yen
D/E ratio (※3)	0.88	(※4) 1.10	(※5) 1.17	about1.0
ROA (※6)	4.4%	1.3%	0.8%	2.4%
ROE (※7)	12.0%	△2.9%	△3.4%	5.1%

※1 : ROS=Ordinary Income / Net Sales

※2 : Kobe Steel carried out a share consolidation at a ratio of 10 shares to 1 share effective on October 1, 2016.

Therefore, net income per share takes into account this share consolidation.

※3 : D/E ratio: Debt (excluding IPP project finance)/stockholders' equity (FY2015 shareholders' equity)

※4 : Includes early procurement of borrowings for FY2016 (90 billion yen)

D/E ratio 0.97 times (excluding early procurement of borrowings)

※5 : Includes early procurement of borrowings for FY2017 (117.6 billion yen)

D/E ratio 1.00 times (excluding early procurement of borrowings)

※6 : ROA=Ordinary Income / Total Assets

※7 : ROE=Net Income / Equity



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Analysis of Consolidated Ordinary Income

【 FY2016 ⇒ FY2017 】

(Billions of yen)

	FY2016			FY2017		
	1H	2H	Full year	1H	2H	Full year
Ordinary Income	12.3	△31.4	△19.1	30.0	25.0	55.0

+ **74.1**

Positive Factors		Negative Factors	
Production and shipments	+ 70.0	Raw material prices	△ 40.0
Overall cost reduction	+ 22.5	Inventory valuation in Iron & Steel	△ 4.0
Inventory valuation in Aluminum & Copper	+ 7.5	Exchange rate changes in steel business	△ 4.0
Subsidiaries & affiliates	+ 26.0	Other	△ 3.9
Total	+ 126.0	Total	△ 51.9



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Analysis of Ordinary Income in Iron & Steel Segment

【 FY2016 ⇒ FY2017 】

(Billions of yen)

	FY2016			FY2017		
	1H	2H	Full year	1H	2H	Full year
Ordinary Income	△9.8	△19.7	△ 29.5	11.0	4.0	15.0
			+ 44.5			

Positive Factors		Negative Factors	
Production and shipments	+ 67.5	Raw material prices	△ 40.0
Overall cost reduction	+ 25.0	Inventory valuation	△ 4.0
		Exchange rate changes	△ 4.0
		Other	△ 0.0
Total	+ 92.5	Total	△ 48.0



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Analysis of Consolidated Ordinary Income

【 FY2017 Previous Forecast ⇒ FY2017 Current Forecast 】

(Billions of yen)

	FY2017 Previous Forecast			FY2017 Current Forecast		
	1H	2H	Full year	1H	2H	Full year
Ordinary Income	20.0	30.0	50.0	30.0	25.0	55.0

+ **5.0**

Positive Factors			Negative Factors		
Production and shipments	+	1.5	Raw material prices	△	1.0
Overall cost reduction	+	2.5	Other	△	0.5
Inventory valuation in Iron & Steel	±	0.0			
Inventory valuation in Aluminum & Copper	+	0.5			
Subsidiaries & affiliates	+	1.5			
Exchange rate changes in steel business	+	0.5			
Total	+	6.5	Total	△	1.5



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Analysis of Ordinary Income in Iron & Steel Segment

【 FY2017 Previous Forecast ⇒ FY2017 Current Forecast 】

(Billions of yen)

	FY2017 Previous Forecast			FY2017 Current Forecast		
	1H	2H	Full year	1H	2H	Full year
Ordinary Income	10.0	5.0	15.0	11.0	4.0	15.0

± **0.0**

Positive Factors			Negative Factors		
Production and shipments	+	1.5	Raw material prices	△	1.0
Overall cost reduction	+	2.0	Other	△	3.0
Inventory valuation	±	0.0			
Exchange rate changes	+	0.5			
Total	+	4.0	Total	△	4.0



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Analysis of Consolidated Ordinary Income

【 FY2017 1H ⇒ FY2017 2H 】

(Billions of yen)

	FY2016			FY2017		
	1H	2H	Full year	1H	2H	Full year
Ordinary Income	12.3	△31.4	△19.1	30.0	25.0	55.0

Δ 5.0

Positive Factors			Negative Factors		
Raw material prices	+	11.0	Production and shipments	△	21.0
Overall cost reduction	+	6.0	Inventory valuation in Iron & Steel	△	9.0
Subsidiaries & affiliates	±	7.0	Inventory valuation in Aluminum & Copper	△	1.0
Other	+	2.5	Exchange rate changes in steel business	△	0.5
Total	+	26.5	Total	△	31.5



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Analysis of Ordinary Income in Iron & Steel Segment

【 FY2017 1H ⇒ FY2017 2H 】

(Billions of yen)

	FY2016			FY2017		
	1H	2H	Full year	1H	2H	Full year
Ordinary Income	△9.8	△19.7	△29.5	11.0	4.0	15.0



△ 7.0

Positive Factors			Negative Factors		
Raw material prices	+	11.0	Production and shipments	△	20.0
Overall cost reduction	+	6.5	Inventory valuation	△	9.0
Other	+	5.0	Exchange rate changes	△	0.5
Total	+	22.5	Total	△	29.5



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Growth Strategies for the Three Core Business Areas

Materials

I Initiatives for weight savings in transportation

Acceleration of automotive weight savings strategy.

(Please refer to Investor Meeting material released in May 2017

http://www.kobelco.co.jp/english/ir/library/fncl_results/2017/_icsFiles/afieldfile/2017/06/20/170526_1.pdf)

II Strengthening profitability in the steel business

- Consolidation of upstream operation at Kakogawa Works is progressing as planned (p.37~39)
- Additional measures to improve profitability are implemented as planned (p.11)

Machinery

I Initiatives in the fields of energy and infrastructure

Promoting the smooth expansion of the machinery business (p.40)

II Strengthening profitability in the construction machinery business

- Promoting the rebuilding of the excavator business in China

(Please refer to Investor Meeting material released in February 2017

http://www.kobelco.co.jp/english/ir/library/fncl_results/2016/_icsFiles/afieldfile/2017/02/27/the_C_M_B_I_C_1.pdf)

Electric Power

Initiatives aimed at stable profitability in the electric power supply business

- All(new/existing) projects are progressing as planned.

(Please refer to Investor Meeting material released in January, 2017

http://www.kobelco.co.jp/english/ir/library/fncl_results/2016/_icsFiles/afieldfile/2017/02/15/170111_e.pdf)



ECO WAY

Strengthening Profitability in the Steel Business

Consolidation of Upstream Operation to Kakogawa Works

- Based on medium- to long-term forecasts on steel demand trends in Japan and overseas, we decided to transfer upstream production at Kobe Works to Kakogawa Works, which provides cost advantages in ironmaking and steelmaking. (Consolidation will be completed in Nov. 2017.)

Structural issues of our steel business

Kobe Works

- ✓ Small scale compared with Kakogawa Works
- ✓ Not equipped with raw material pretreatment facilities such as coke ovens and sintering shop
- ✓ Dependent on raw material supply from Kakogawa Works or outside sources

Kakogawa Works

- ✓ Surplus capacity expected due to lower demand



Details of upstream consolidation

Kobe Works

- ✓ Shut down upstream production facilities
 - Blast Furnace, Hot-Metal Pretreatment, Ladle Refining, Continuous Casting, Blooming, etc.
- ✓ Continue downstream operations
 - Wire & Bar Rolling

Kakogawa Works

- ✓ Cover capacity reduction at Kobe Works by increasing upstream operations
- ✓ Increase production of semifinished products for Kobe Works
 - Construct new Continuous Bloom Caster and Ladle Refining Equipment
 - Increase production capacity of Bloom Mill, transfer capability of semifinished products



Investment Amount: ¥65.5 billion



ECOWAY

Strengthening Profitability in the Steel Business Aims for Consolidation of Upstream Operation

✓ Strengthening cost competitiveness through process transfer to Kakogawa Works

→ Cost reduction in ironmaking

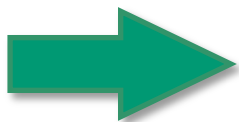
(Improvement in tapping ratio of molten iron, reduction of coking cost, etc.)

→ Cost reduction in steelmaking

(Lower unit cost in steelmaking)

→ Other cost reductions

(Improvement in utility efficiency, reduction of fixed costs)



Return on Upstream Consolidation & Equipment Investment:

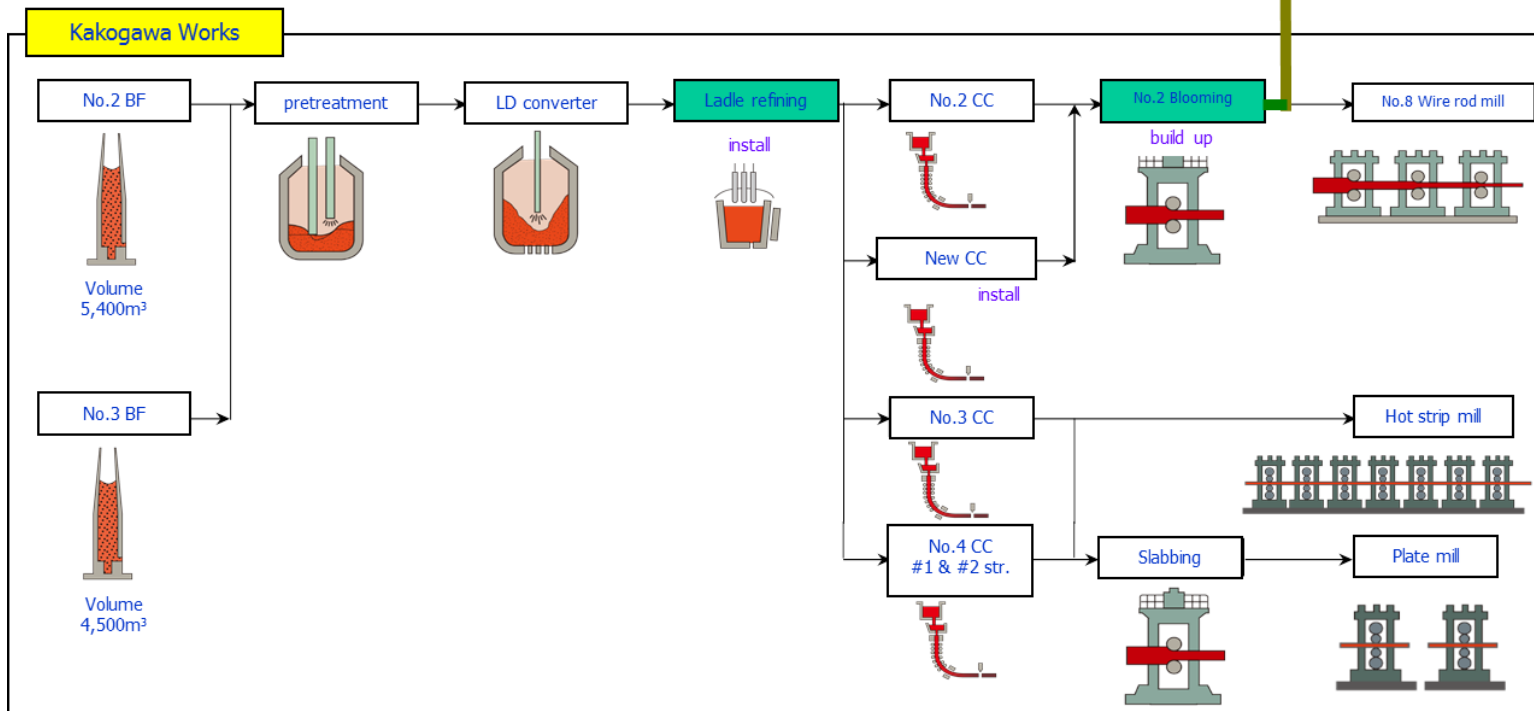
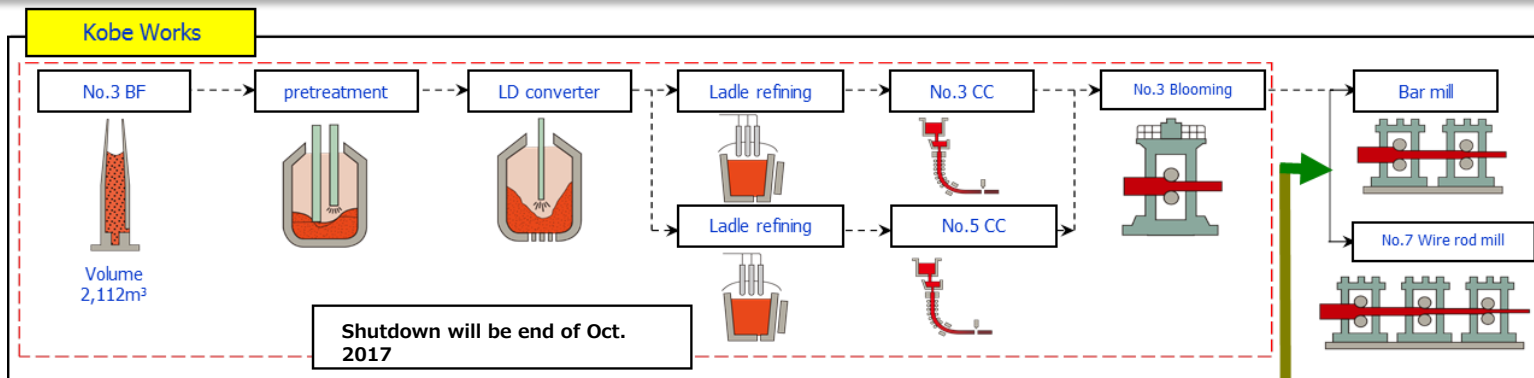
More than ¥ 15 billion/year

- ✓ Quality improvement and strengthening delivery capability by utilizing new, state-of-the-art continuous caster and refining equipment
- ✓ Increase of sales and profit through total cost reduction
- ✓ Growth in the transportation field by upgrading sales mix of steel products
(Ultra high-strength steel sheets, special steel wires, etc.)



ECO WAY

Strengthening Profitability in the Steel Business Production Flows of Upstream Consolidation





ECOWAY

[Machinery] Initiatives in the Fields of Energy and Infrastructure

Marketing begins for HyAC mini-A all-in-one compressor packages in US

February 2017

Kobe Steel has started marketing the HyAC mini-A all-in-one, compact compressor package for hydrogen refueling stations in the U.S.

- ◆ The footprint is 10 percent smaller than the HyAC mini sold in Japan.
- ◆ Selling it with a dispenser made by Tatsuno Corporation enables Kobe Steel to provide equipment from hydrogen compression to fueling FCVs.



Simplifies component procurement for customers and reduces onsite adjustment work

Kobe Steel acquires Swedish company Quintus Technologies

April 2017

Kobe Steel acquired Swedish company Quintus Technologies AB, the world leader in isostatic presses.

Its presses are widely applicable in the manufacture of high-performance products, such as aircraft parts, power generation turbine blades and semiconductor materials. It has achieved a strong presence in Europe and the United States primarily in the aerospace sector.

Strengthens our IP menu as a stable profit base for the Industrial Machinery Division

40 MW compressor test facility opens in April *One of the largest in the world*

April 2017

This facility is capable of conducting performance tests on nonstandard compressors with variable-speed motors of 40 MW. It enables Kobe Steel to satisfy conditions to enter the large-capacity compressor market.



Focus on capturing the Asian market, where Kobe Steel has an edge



ECOWAY

[Materials] Initiatives for Weight Savings in Transportation

Field	Project	Country	Description	Schedule
Automotive	Joint venture to make and sell steel wire rods (Kobelco Millcon Steel Co., LTD)	Thailand	First overseas location for wire rod production. Will help growing auto demand in Southeast Asia.	Sept. 2015 Production of ordinary steel wire rod began May 2017 Production of special steel wire rod
	Joint venture to make and sell CH steel wire (Kobelco CH Wire Mexicana, S.A. de C.V.)	Mexico	Quickly supply products of outstanding quality to local auto parts makers	Jan. 2016 Production began
	Joint venture to make and sell automotive high strength steel sheet (Kobelco Angang Auto Steel Co., Ltd.)	China	Strengthening of environmental responsiveness in China Established global supply network for high strength steel in Japan, U.S., Europe and China	Feb. 2016 Production began
	Production and sale of aluminum sheet for automotive panels (Kobe Automotive Rolled Products (China) Co., Ltd.)	China	First production base in China for a Japanese aluminum maker to make panel material	Apr. 2016 Production began
	Production and sale of automotive aluminum extrusions (Kobelco Aluminum Products & Extrusions Inc.)	USA	Strengthens response to stricter fuel consumption regulations in U.S. Establishes supply network for aluminum extrusions and fabricated products in Japan and U.S.	Aug. 2016 Construction began 2H 2017 Production begins
	Mass producing high-productivity, hot stamping steel sheet	-	It has developed a hot stamping steel sheet with outstanding productivity during press operations. The sheet was ordered and adopted for a structural body part of the Prius, which is produced by Toyota Motor Corporation.	2016 Mass production began
	New establishment of "Automotive Solution Center"	-	"Automotive Solution Center" was newly organized in Technical Development Group. A managing director was newly posted. It is aimed to promote rapid decision and companywide strategy for automotive weight savings.	Apr. 2017 Established the center
	Expansion of aluminum forged suspension products' facilities (Kobelco Aluminum Automotive Products, LLC)	USA	The expansion plan is to meet the rising demand in North America for aluminum forged suspension products. Kobe Steel anticipates that automakers in the US will use aluminum forged suspension products in a wider range of vehicles.	2018 Autumn Additional facilities start
	Establishment of a joint venture with Novelis Korea (Ulsan Aluminum Ltd.)	South Korea	This plan is in response to the growing demand for automotive aluminum panel materials in Asia, including Japan and China. It aims to secure stable production and supply capacity in upstream operations.	Sep. 2017 Joint venture to be established
Expansion of automotive aluminum panel materials' facilities at the Moka Plant	Japan	The expansion plan is to respond to the growing demand for aluminum panel material in Asia, including Japan and China. Kobe Steel aims to build a stable supply structure for high quality aluminum panel material.	FY2017 Construction begins Jan. 2020 Production begins	
Aircraft	Began mass production of large titanium forged parts for Airbus planes	-	First in Japan to succeed in research on and mass production of large forgings for landing gears	July 2016 Production began
	After receiving approval, began mass production of titanium alloy forgings for large GE jet engine	-	Received approval as a supplier of titanium alloy forged parts (shafts) for large commercial GE jet engine	August 2016 Received certification. Began mass production.
Ships	Development and approval of steel forged parts for ships	-	Supply of strong, light parts for ships. Contributes to improving fuel consumption of ships	Oct. 2016 Gained approval
	Binary cycle power generation system for ships completes sea trials	Japan	Kobe Steel, ASAHI SHIPPING CO., LTD. And MIURA CO., LTD. did joint development of a binary cycle power generation system for ships, it generates electricity from the exhaust heat emitted by the ship's turbocharger. This system is the first in the world for ships and the largest scale of power generation from exhaust heat on a ship.	Apr. 2014 Development began Sep. 2015 Land-based testing was completed Dec. 2016 Sea trials passed Mar. 2017 Approval from Japan's ship classification society Nippon Kaiji Kyokai received Apr. 2019 sales starts



ECOWAY

【Machinery】 Initiatives in the Fields of Energy and Infrastructure

Field	Project	Country	Description	Schedule
Compressors	Sales begin for new oil-free standard air compressors	—	World's highest class of energy efficiency; low-noise operation	Oct. 2016 Sales began
	Order for screw compressors for LNG carrier	—	World's first use of screw compressors in marine dual phase engines	Oct. 2016 Order received Aug. 2017 Planned delivery
	HyAC mini-A all-in-one, compact compressor package for hydrogen refueling stations in the US	USA	It has started marketing of the HyAC mini-A, an all-in-one, compact compressor package for stationary hydrogen refueling stations designed for use in the United States, consists of a high-pressure hydrogen compressor and a refrigerator sold together with a high-pressure storage tank unit and a dispenser as a set. This is the first in Japan to sell hydrogen compressor and so on for hydrogen refueling stations overseas.	Feb. 2017 Sales began
	Binary power generation system for Toyako spring in Hokkaido	Japan	Our binary power generation system, high efficiency and compact package was provided for the project of the geothermal energy utilization in Toyako-cho in Hokkaido.	Mar. 2017 Order received
	Acquisition of Swedish isostatic press manufacturer Quintus Technologies	Sweden	Kobe Steel acquired Swedish company Quintus Technologies AB, The world leader in isostatic presses, which are widely applicable in the manufacture of high-performance products, such as aircraft parts, power generation turbine and semiconductor materials. It aims to increase the profitability of Industrial Machinery Division.	Apr. 2017 Acquisition completed
	Large-capacity compressor test facility opens	Japan	One of the largest in the world, this test facility is capable of conducting performance tests on nonstandard compressors with variable-speed motors of 40 MW. It enables Kobe Steel to satisfy conditions to enter the large-capacity compressor market. We are focusing on the Asian market, where Kobe Steel has an edge.	Apr. 2017 Facility opened
	Establishment of a compressor service company in the Philippines (Kobelco Machinery Philippines Inc.)	Philippines	Kobe Steel established a company in the Philippines to dispatch supervisors and provide engineering services for its nonstandard compressor business to expand its services in the region. It aims to further grow its global non-standard compressor business and set down roots in areas of demand.	Feb 2017 Established Apr.2017 Sales began
Construction Machinery	New excavator plant (Kobelco Construction Machinery U.S.A. Inc.)	USA	Strengthen response to meet market needs; reduce manufacturing lead time	Mar. 2016 Production began
	Sales begin of ultra-large crawler cranes in Japan(Lifting capacity of 1,250t)	—	One of Japan's largest crawler cranes	May 2016 Sales began
Engineering	Joint venture for radioactive waste treatment (KOBELCO STUDEVIK Co., Ltd.)	Japan	Radioactive waste treatment technologies and processes from decommissioning of nuclear power plants in Japan	Apr. 2016 Entered into agreement
	New order for MIDREX direct reduced ironmaking plant	Algeria	2.5mtpy capacity: Largest class in the world Contributing to development of industry in Algeria	June 2016 Order received Nov. 2018 Production begins
	Operation of energy-recovery waste treatment plant	Japan	Utilizes fluidized bed gasification and combustion furnace. Next-generation incineration furnace contributes to compact facility, maximizes power generation and reduces environmental burden	Jun. 2016 Order received 2016-2019 Construction of facility 2019-2039 Facility in operation
	Received order to construction and operate a wide-area waste treatment plant	Japan	To handle a wide variety of waste, a stoker-type incineration furnace will be used for safe, stable incineration. Low excess air combustion and high-efficiency power generation contribute to lowering the environmental burden.	Dec. 2016 Order received 2016-2022 Construction of facility 2022-2042 Facility in operation



ECO WAY

【Electric Power】 Initiatives for Stable Profitability in the Electric Power Supply Business

Field	Project	Country	Description	Schedule
Electric Power	Nos. 1 & 2 units at Kobe (Kobelco Power Kobe, Inc.)	Japan	Pulverized coal-fired, supercritical pressure power generation equipment, started from 2002. New contracts were formed as current contracts are ending. Capacity: 1.4 mil. kW (700,000 kW × 2)	Apr. 2002 No. 1 unit starts up Apr. 2004 No. 2 unit starts up [Starts of new contracts] No.1 unit: from Apr. 2017 No.2 unit: from Apr. 2019
	Nos. 1 & 2 units at Moka (Kobelco Power Moka, Inc.)	Japan	Japan's first full-scale inland power station. Will have one of Japan's highest levels of generation efficiency. Method is gas turbine combined cycle, using city gas as fuel. Capacity: 1.248 mil. kW (624,000 kW X 2)	Jun. 2016 Construction began 2H 2019 No. 1 Unit starts up 1H 2020 No. 2 Unit starts up
	Nos. 3 & 4 units at Kobe (provisional name: Kobe Works Thermal Power Plant)	Japan	To feature cutting-edge coal-fired, ultra-supercritical generation equipment Capacity: 1.3 mil. kW (650,000 kW x 2)	FY2021 No. 3 unit to start up FY2022 No. 4 unit to start up



Core Values of KOBELCO

- 1. We provide technologies, products and services that win the trust and confidence of our customers we serve and the society in which we live.**
- 2. We value each employee and support his and her growth on an individual basis, while creating a cooperative and harmonious environment.**
- 3. Through continuous and innovative changes, we create new values for the society of which we are a member.**

