

**Fiscal 2017 First Half
Supplementary Information**

November 10, 2017

DOWA HOLDINGS CO.,LTD.

Overview of Operating Results

■ Consolidated Income Statements

Billion yen

	FY2016 H1 results	FY2017 H1		Year on year changes	
		forecast on May 9 (ref.)	results		
Net Sales	184.7	208.0	219.3	34.5	19%
Operating Income	13.3	15.0	14.6	1.3	10%
Ordinary Income	13.5	16.0	17.2	3.6	27%
Profit attributable to owners of parent	9.8	11.5	11.7	1.8	19%

- ✓ In the first half of FY2017, the ordinary income rose 27% year on year.
- ✓ Earnings increased particularly in Nonferrous Metals due to the weaker yen and a rise in non-ferrous metal prices.

■ Metal prices and foreign exchange rates

	FY2016 Average			FY2017 Average		
	1Q	2Q	H1	1Q	2Q	H1
Exchange Rate: (¥/\$)	108.1	102.4	105.3	111.1	111.0	111.1
Copper: (\$/t)	4,730	4,774	4,752	5,663	6,347	6,005
Zinc: (\$/t)	1,915	2,253	2,084	2,598	2,962	2,780
Indium: (\$/kg)	237	206	222	186	182	184

Business Environment (H1)

➤ **Waste-related business**

The amount of industrial waste generated in Japan remained flat, and waste treatment in Southeast Asia was firm.

➤ **Automobile-related business**

Domestic: The production volume of automobiles increased year on year.

Overseas: Output in China and Southeast Asia remained firm.

➤ **New forms of energy- and electronic components-related business**

New energy: The worldwide market expansion continued.

Electronic components: Demand for smartphones grew mainly in East Asia.

➤ **Metal prices and Exchange rates**

Metal prices: Generally rose including copper and zinc.

Exchange rate: Without major fluctuations, it was around 110 yen per dollar.

Trends in Major Products

Indexes (100 for Q1 of FY2016)

		FY2016				FY2017	
		1Q	2Q	3Q	4Q	1Q	2Q
Environmental Management & Recycling	Intermediate waste processing volume in Japan	100	104	109	102	106	96
	Recycling materials collection volume (Kosaka)	100	108	111	91	96	92
	Waste processing amount in South East Asia	100	103	111	129	120	112
Nonferrous Metals	Copper production (Kosaka, Onahama)	100	86	83	89	85	70
	Zinc production (Akita)	100	72	91	99	92	73
Electronic Materials	LED sales volume	100	88	82	86	79	85
	Silver powder sales volume	100	101	97	95	89	105
Metal Processing	Copper alloy strip sales volume	100	104	106	104	105	101
Heat Treatment	Heattreatment sales amount	100	103	118	116	112	118
	Industrial furnace sales amount	100	116	109	183	104	148

Year-on-Year Comparison (H1)

Billion yen

	FY2016 H1 results			FY2017 H1 results			Change			Details of Changes to Operating Income
	Net Sales	Operating Income	Ordinary Income	Net Sales	Operating Income	Ordinary Income	Net Sales	Operating Income	Ordinary Income	
Environmental Management & Recycling	45.4	2.6	2.4	48.2	2.6	2.9	2.8	(0.0)	0.4	- Waste treatment was firm in Southeast Asia. - Low-contaminated PCB treatment business was sluggish.
Nonferrous Metals	94.5	3.2	3.9	102.3	4.3	6.5	7.8	1.1	2.6	- Increased in PGM business. - Earning increased due to the rising zinc price and weaker yen.
Electronic Materials	27.0	2.8	2.8	41.0	3.0	3.3	14.0	0.1	0.4	- LED for smartphones sales increased. - Earnings increased due to the weaker yen.
Metal Processing	35.0	3.2	3.2	42.2	3.2	3.3	7.1	0.0	0.1	- Demand for copper rolled products for automobiles and smartphones was firm. - Depreciation increased.
Heat Treatment	11.5	0.8	0.7	12.9	1.0	0.9	1.4	0.1	0.2	- Demand for heat treatment for automobile parts was firm. - Sales of heat treatment facilities expanded overseas.
Other/ Elimination	(28.8)	0.5	0.4	(27.6)	0.4	0.0	1.2	(0.0)	(0.3)	
Total	184.7	13.3	13.5	219.3	14.6	17.2	34.5	1.3	3.6	

Factor Analysis of Ordinary Income

Billion yen

FY2017 H1 – FY2016 H1	Environmental Management & Recycling	Nonferrous Metals	Electronic Materials	Metal Processing	Heat Treatment	Other	Total
Effect of various measures, increase/decrease in sales, etc.	(0.1)	1.6	0.0	0.2	0.2	(0.1)	1.8
Of the above, free metal income difference (volume difference)	–	1.0	–	–	–	–	1.0
Free metal income difference (metal price difference)	–	0.8	–	–	–	–	0.8
Exchange rate difference of foreign currency-based income	–	0.9	0.2	–	–	–	1.1
Conditions of raw material (changes in base conditions)	–	(0.1)	–	–	–	–	(0.1)
Difference between the market value and book value at sale, and between market value and valuation prices at end of period	–	(1.0)	–	–	–	–	(1.0)
Electricity charges, etc.	–	(0.2)	–	–	–	–	(0.2)
Depreciation in manufacturing cost	0.1	(0.7)	(0.1)	(0.2)	(0.1)	(0.0)	(0.9)
Increase/decrease in operating income	(0.0)	1.1	0.1	0.0	0.1	(0.0)	1.3
Effect of non-operating income/expenses							
- Equity method income or loss	(0.1)	1.1	0.0	0.0	0.0	(0.2)	0.7
- Other	0.7	0.4	0.3	0.1	0.1	(0.0)	1.5
Increase/decrease in ordinary income	0.4	2.6	0.4	0.1	0.2	(0.3)	3.6

Financial Highlights (1)

■ Consolidated Balance Sheets

Billion yen

	Mar. 31, 2017	Sep. 30, 2017	Change		Mar. 31, 2017	Sep. 30, 2017	Change
Current Assets	194.8	216.5	21.7	Current Liabilities	121.1	143.8	22.7
				Noncurrent Liabilities	55.6	54.1	(1.5)
Noncurrent Assets	209.7	215.5	5.7	Non-Controlling Interests	8.5	8.7	0.2
				Equity	219.3	225.3	6.0
Total Assets	404.6	432.0	27.4	Total Liabilities and Net Assets	404.6	432.0	27.4
				Interest-bearing debt	79.8	94.6	14.7
				Equity ratio (%)	54.2	52.2	(2.0)

- ✓ Total assets increased year on year to 432 billion yen, mainly due to an increase in inventories in raw materials for smelting and refining associated with rising metal prices.
- ✓ Interest-bearing debt increased to 94.6 billion yen due to payments for increasing inventories of raw materials for smelting and refining.

Financial Highlights (2)

■ Consolidated Statements of Cash Flows

Billion yen

	FY2016 H1	FY2017 H1	Change
Cash Flows from Operating Activities	10.7	0.4	(10.3)
Profit before income taxes	13.5	17.0	3.5
Depreciation and amortization	7.3	8.3	1.0
Income taxes (paid) refund	(2.6)	(7.6)	(5.0)
Inventories	(5.6)	(21.5)	(15.9)
Other, net	(1.8)	4.2	6.0
Cash Flows from Investing Activities	(11.8)	(12.2)	(0.3)
Acquisition of property, plant and equipment	(10.7)	(10.8)	(0.1)
Other investments	(1.1)	(1.3)	(0.2)
Cash Flows from Financing Activities	(1.2)	9.1	10.4
Total	(2.4)	(2.6)	(0.2)

Forecast for Fiscal 2017

Billion yen

	FY2016 results	FY2017 forecast	Change
Net Sales	410.5	434.0	23.4
Operating Income	33.9	34.0	–
Ordinary Income	36.5	36.5	–
Profit attributable to owners of parent	26.1	26.0	(0.1)

- ✓ The business prospects are expected to keep steady in line with initial forecast, but at this time the full year forecast is unchanged.

Year-on-Year Comparison (full year)

Billion yen

	FY2016 Results			FY2017 Forecast			Change		
	Net Sales	Operating Income	Ordinary Income	Net Sales	Operating Income	Ordinary Income	Net Sales	Operating Income	Ordinary Income
Environmental Management & Recycling	96.9	6.6	6.8	99.0	7.0	7.0	2.0	0.3	0.1
Nonferrous Metals	207.7	10.0	12.2	214.0	9.6	11.8	6.2	(0.4)	(0.4)
Electronic Materials	62.5	6.5	6.8	66.0	6.0	6.5	3.4	(0.5)	(0.3)
Metal Processing	75.4	6.9	7.1	84.0	7.1	7.2	8.5	0.1	0.0
Heat Treatment	25.1	2.3	2.2	30.0	2.9	2.8	4.8	0.5	0.5
Other/ Elimination	(57.4)	1.3	1.1	(59.0)	1.4	1.2	(1.5)	0.0	0.0
Total	410.5	33.9	36.5	434.0	34.0	36.5	23.4	0.0	0.0

Assumptions and Sensitivities(FY2017 H2)

Sensitivity (Operating Income / H2)			Million yen
	Assumptions	Fluctuation	Sensitivity
Exchange rate	115.0 ¥/\$	± 1 ¥/\$	210
Copper	5,500 \$/t	±100 \$/t	30
Zinc	2,700 \$/t	±100 \$/t	250
Indium	190 \$/kg	±100 \$/kg	300

* Exchange rate sensitivity; Nonferrous Metals 170 million yen and Electronic Materials 40 million yen.

Metal Prices and Foreign Exchange Rates

	FY2016 Average			FY2017 Average			(ref.)
	H1	H2	Full Year	H1 results	H2 assumption	Full Year estimation	Oct. 2017 Ave.
Exchange rate: (¥/\$)	105.3	111.5	108.4	111.1	115.0	113.0	113.0
Copper: (\$/t)	4,752	5,557	5,154	6,005	5,500	5,752	6,797
Zinc: (\$/t)	2,084	2,650	2,367	2,780	2,700	2,740	3,274
Indium: (\$/kg)	222	192	207	184	190	187	206

Sensitivity is based on assumptions that the Company assumes to be reasonable at the time of publication. Actual effects may differ materially due to a variety of factors.

Investment

Billion yen

	FY2015 Results			FY2016 Results			FY2017 H1 Results			FY2017 Estimation		
	Capital investment	R&D investment	Total	Capital investment	R&D investment	Total	Capital investment	R&D investment	Total	Capital investment	R&D investment	Total
Environmental Management & Recycling	9.1	0.3	9.4	5.7	0.3	6.0	3.3	0.1	3.5	7.0	0.4	7.4
Nonferrous Metals	5.2	4.5	9.7	8.2	2.0	10.3	2.5	0.3	2.8	4.9	0.9	5.8
Electronic Materials	3.8	2.9	6.8	3.7	3.2	7.0	2.9	1.7	4.6	4.0	3.4	7.4
Metal Processing	2.8	0.5	3.4	4.0	0.5	4.5	1.7	0.2	1.9	5.5	0.5	6.0
Heat Treatment	3.0	0.4	3.5	5.3	0.4	5.7	2.4	0.1	2.5	5.0	0.3	5.3
Companywide, Other	0.7	(0.1)	0.5	2.4	0.0	2.3	0.2	0.0	0.2	1.5	0.0	1.5
Total	24.9	8.6	33.6	29.4	6.6	36.1	13.1	2.5	15.7	27.9	5.8	33.7

(Ref.) Depreciation Expenses

	FY2015 Results	FY2016 Results	FY2017 H1 Results	FY2017 Estimation
Environmental Management & Recycling	4.7	4.5	2.0	4.7
Nonferrous Metals	2.9	3.8	2.2	4.6
Electronic Materials	2.4	2.3	1.2	3.0
Metal Processing	2.0	2.0	1.0	2.7
Heat Treatment	2.0	1.9	0.9	2.2
Companywide, Other	0.9	0.9	0.5	1.1
Total	15.1	15.7	8.1	18.6

Major investments for FY2017

Environmental Management & Recycling:

Increase in the capacity of prior equipment dismantling of low-contaminated PCB waste.

Nonferrous Metals:

Build/renew zinc producing facilities.

Electronics Materials:

Expansion and upgrading of manufacturing facilities of Silver powder and Ferrite powder.

Metal Processing:

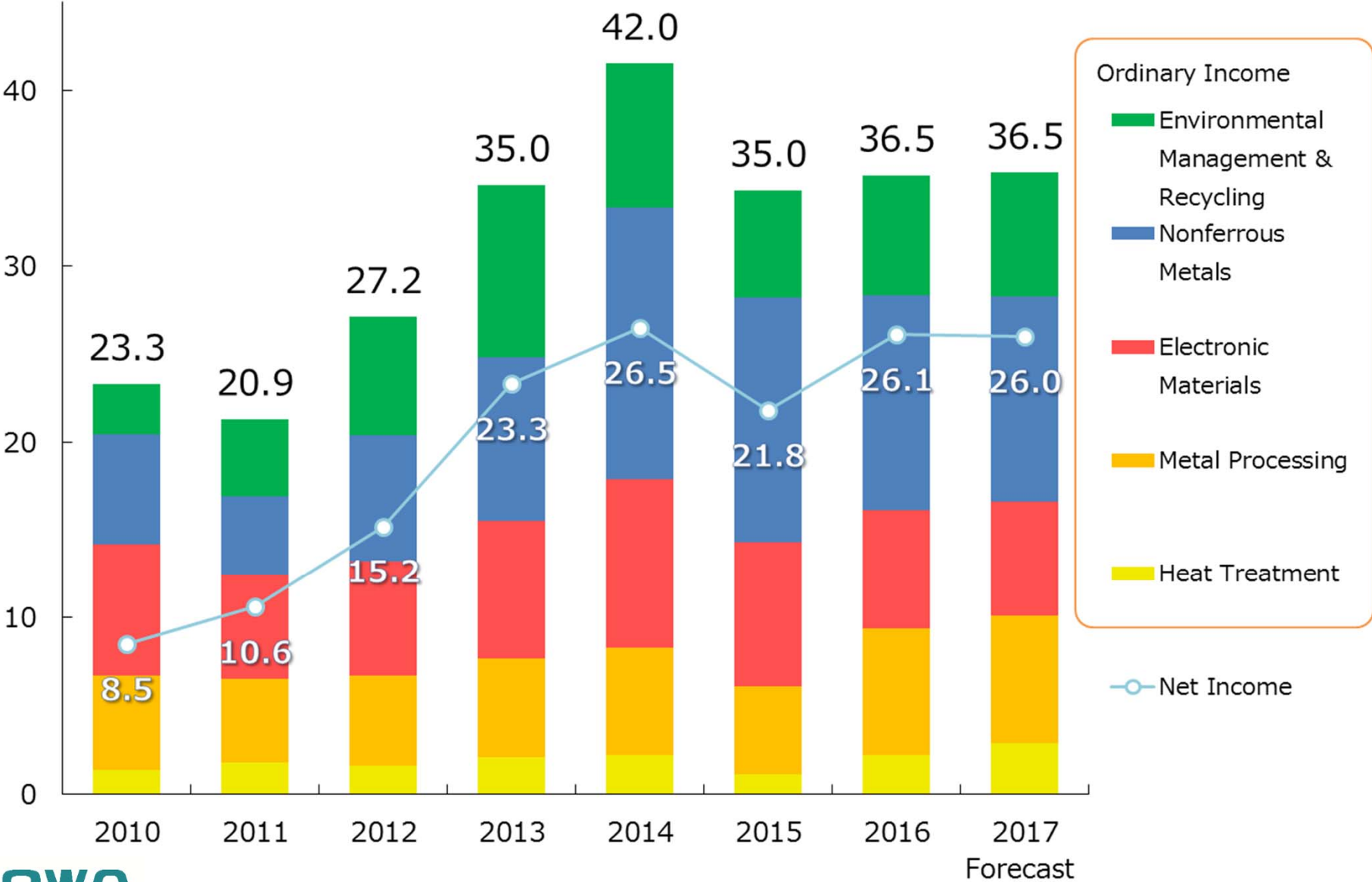
Expansion and upgrading of manufacturing facilities of Metal ceramic substrates.

Heat treatment:

Expansion and upgrading of heat treatment facilities.

Ordinary Income and Net Income

(Billion yen)



Ref. FY2017 Forecast Comparison (H1)

Billion yen

	FY2017 H1 Forecast (May 9, 2017)			FY2017 H1 results			Change		
	Net Sales	Operating Income	Ordinary Income	Net Sales	Operating Income	Ordinary Income	Net Sales	Operating Income	Ordinary Income
Environmental Management & Recycling	47.0	2.9	2.8	48.2	2.6	2.9	1.2	(0.2)	0.1
Nonferrous Metals	102.0	3.9	5.2	102.3	4.3	6.5	0.3	0.4	1.3
Electronic Materials	33.0	3.0	3.2	41.0	3.0	3.3	8.0	0.0	0.1
Metal Processing	41.0	3.4	3.4	42.2	3.2	3.3	1.2	(0.1)	0.0
Heat Treatment	14.0	1.2	1.2	12.9	1.0	0.9	(1.0)	(0.1)	(0.2)
Other/Elimination	(29.0)	0.6	0.2	(27.6)	0.4	0.0	1.3	(0.1)	(0.1)
Total	208.0	15.0	16.0	219.3	14.6	17.2	11.3	(0.3)	1.2

DOWA

* Forward-looking statements made in this document, such as business forecast, are based on the information available at this time and on certain premises that the Company assumes to be reasonable. Actual performance may differ materially from such forecasts due to a variety of factors.