

Fiscal 2019 First Half Supplementary Information

November 12, 2019

DOWA HOLDINGS CO.,LTD.

Operating Results

■ Consolidated Income Statements

Billion yen

	FY2018		FY2019		Changes			
	H1 Results	Full Year Results	H1 Results	Full Year Forecasts	H1		Full Year	
Net Sales	221.8	452.9	230.7	480.0	8.9	4%	27.0	6%
Operating Income	9.3	18.6	11.0	24.5	1.7	18%	5.8	31%
Ordinary Income	12.8	24.3	12.4	30.0	(0.3)	(3%)	5.6	23%
Profit attributable to owners of parent	8.8	14.9	7.9	20.0	(0.9)	(11%)	5.0	33%

* Full Year forecasts for FY2019 was revised on November 6, 2019.

■ Exchange Rate and Metal Prices

	FY2018			FY2019		
	1Q averages	2Q averages	H1 averages	1Q averages	2Q averages	H1 averages
Exchange Rate: (¥/\$)	109.1	111.5	110.3	109.9	107.4	108.6
Copper: (\$/t)	6,872	6,103	6,487	6,114	5,798	5,956
Zinc: (\$/t)	3,114	2,534	2,824	2,763	2,345	2,554
Indium: (\$/kg)	307	266	286	173	155	164

Business Environment (FY2019 2Q)

➤ Waste treatment- and Recycling-related business

The waste treatment in Japan increased both incineration and melting / recycling volume.

In Southeast Asia, the treatment volume decreased mainly in Thailand and Indonesia.

The volume of consumer electronic products recycling increased.

➤ Automobile-related market

Continued sluggish demand mainly due to the slowdown of the Chinese market.

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

New energy-related products: Demand from China turned upward.

Electronic component-related products: Demand for smartphones remained weak.

➤ Metal prices and Exchange rates

In the situation of growing the uncertainty globally, the prices of precious metal increased while those of base metals were relatively low. In terms of the foreign exchange market, the yen remained strong.

Trends in Major Products

Indexes (100 for Q1 of FY2018)

		FY2018				FY2019	
		1Q	2Q	3Q	4Q	1Q	2Q
Environmental Management & Recycling	Waste treatment volume in Japan	100	83	91	85	100	89
	Recycling materials collection volume (for Kosaka smelting & refining)	100	98	88	82	80	84
	Net sales of waste treatment in the South East Asia Business	100	101	96	98	96	93
Nonferrous Metals	Copper production volume (Total of Kosaka and Onahama)	100	80	79	95	91	85
	Zinc production volume	100	73	101	95	102	70
Electronic Materials	LED sales volume	100	80	66	48	51	63
	Silver powder sales volume	100	91	100	88	103	119
Metal Processing	Copper alloy strips sales volume	100	100	107	100	93	95
Heat Treatment	Net sales in the Heat Treatment Processing Business	100	100	104	94	93	95
	Net sales in the Industrial Furnaces Business	100	156	176	207	134	156

Year-on-Year Comparison by Segment

Billion Yen

	FY2018 H1 Results			FY2019 H1 Results			Changes			Details of Changes to Ordinary Income
	Net Sales	Operating Income	Ordinary Income	Net Sales	Operating Income	Ordinary Income	Net Sales	Operating Income	Ordinary Income	
Environmental Management & Recycling	51.2	2.8	3.2	53.5	3.4	3.1	2.2	0.6	(0.0)	<ul style="list-style-type: none"> - Increment of the treatment volume of incineration and melting / recycling - Deterioration of equity method gains
Nonferrous Metals	109.3	0.1	2.7	107.8	3.4	4.6	(1.5)	3.2	1.9	<ul style="list-style-type: none"> - Improvement of purchase conditions of raw materials - Increment of PGM recovery - Decreasing in loss due to the lowering the book value
Electronics Materials	33.3	1.6	2.1	43.7	0.6	1.2	10.4	(0.9)	(0.9)	<ul style="list-style-type: none"> - Sales reduction of LEDs for smartphones - Sales increment of silver powder in Chinese market
Metal Processing	46.0	3.1	3.2	41.5	2.4	2.5	(4.5)	(0.6)	(0.7)	<ul style="list-style-type: none"> - Demand decreasing for automobiles and smartphones
Heat Treatment	13.6	1.2	1.2	14.0	0.6	0.5	0.3	(0.6)	(0.7)	<ul style="list-style-type: none"> - Demand decreasing in heat treatment processing - Increment in fixed expenses due to capital investments
Other/ Elimination	(31.7)	0.4	0.2	(29.8)	0.4	0.2	1.8	0.0	0.0	
Total	221.8	9.3	12.8	230.7	11.0	12.4	8.9	1.7	(0.3)	

Factor Analysis of Ordinary Income

Billion yen

FY2019 H1 – FY2018 H1	Environmental Management & Recycling	Nonferrous Metals	Electronics Materials	Metal Processing	Heat Treatment	Other	Total
Effect of various initiatives, increase/decrease in sales, etc.	0.7	1.1	(0.8)	(0.5)	(0.5)	0.1	0.0
Of the above, free metal income difference (difference in volume)	—	1.2	—	—	—	—	1.2
Free metal income difference (difference in metal prices)	—	(0.2)	—	—	—	—	(0.2)
Difference in foreign currency-based income due to exchange rate	—	(0.0)	(0.0)	—	—	—	(0.1)
Purchasing conditions of raw material (difference in base conditions)	—	0.0	—	—	—	—	0.0
Difference between the market value and book value at sale, and between market value and valuation prices at end of period	—	2.5	—	—	—	—	2.5
Electricity charges, etc.	—	(0.2)	—	—	—	—	(0.2)
Depreciation in manufacturing cost	(0.1)	0.1	(0.1)	(0.1)	(0.1)	(0.0)	(0.3)
Increase/decrease in operating income	0.6	3.2	(0.9)	(0.6)	(0.6)	0.0	1.7
Effect of non-operating income/expenses							
- Equity method income or loss	(0.4)	(1.1)	0.0	(0.0)	0.0	(0.0)	(1.5)
- Other	(0.3)	(0.2)	(0.0)	(0.0)	(0.1)	0.0	(0.5)
Increase/decrease in ordinary income	(0.0)	1.9	(0.9)	(0.7)	(0.7)	0.0	(0.3)

Forecasts Comparison by Segment

Billion Yen

	FY2019 H1 Forecasts on May 13			FY2019 H1 Results			Changes			Details of Changes to Ordinary Income
	Net Sales	Operating Income	Ordinary Income	Net Sales	Operating Income	Ordinary Income	Net Sales	Operating Income	Ordinary Income	
Environmental Management & Recycling	50.8	2.5	2.4	53.5	3.4	3.1	2.7	0.9	0.7	- Increment of the treatment volume of incineration and melting / recycling - Increment of soli remediation projects
Nonferrous Metals	100.3	1.5	3.3	107.8	3.4	4.6	7.5	1.9	1.3	- Rose of precious metal prices - Decreasing in loss due to the lowering the book value
Electronics Materials	32.2	0.2	0.9	43.7	0.6	1.2	11.5	0.4	0.3	- Seles increment of silver powder in Chinese market
Metal Processing	44.3	2.8	2.9	41.5	2.4	2.5	(2.7)	(0.3)	(0.3)	- Demand decreasing for smartphones
Heat Treatment	14.5	1.0	1.0	14.0	0.6	0.5	(0.4)	(0.3)	(0.4)	- Demand decreasing for automobiles and smartphones in heat treatment processing
Other/ Elimination	(25.1)	0.5	0.3	(29.8)	0.4	0.2	(4.7)	0.0	(0.0)	
Total	217.0	8.5	10.8	230.7	11.0	12.4	13.7	2.5	1.6	

Financial Highlights (1)

■ Consolidated Balance Sheets

Billion yen

	Mar. 31, 2019	Sep. 30, 2019	Changes		Mar. 31, 2019	Sep. 30, 2019	Changes
Current Assets	238.0	233.1	(4.8)	Current Liabilities	163.4	151.0	(12.4)
				Noncurrent Liabilities	85.0	97.6	12.6
Noncurrent Assets	256.6	265.0	8.3	Non-Controlling Interests	8.9	9.4	0.5
				Equity	237.2	240.0	2.7
Total Assets	494.6	498.2	3.5	Total Liabilities and Net Assets	494.6	498.2	3.5
				Interest-bearing debt	135.2	146.3	11.0
				Equity ratio (%)	48.0	48.2	0.2

- ✓ Fixed assets increased due to investments in new businesses and overseas business development, and total assets were 498.2 billion yen, up 3.5 billion yen from the end of the previous fiscal year.
- ✓ With these investments, interest-bearing debt increased to 146.3 billion yen.

Financial Highlights (2)

■ Consolidated Statements of Cash Flows

Billion yen

	FY2018 H1	FY2019 H1	Changes
Cash Flows from Operating Activities	15.4	21.8	6.3
Profit before income taxes	12.6	12.4	(0.2)
Depreciation and amortization	9.0	9.2	0.2
Income taxes (paid) refund	(5.3)	(3.2)	2.0
Inventories	(7.4)	3.9	11.3
Other, net	6.5	(0.5)	(7.1)
Cash Flows from Investing Activities	(21.5)	(21.7)	(0.2)
Acquisition of property, plant and equipment	(11.1)	(15.1)	(3.9)
Other investments	(10.3)	(6.6)	3.7
Cash Flows from Financing Activities	7.8	6.0	(1.7)
Total	1.8	6.1	4.3

Forecasts

■ Consolidated Income Statements

Billion yen

	FY2018 Results ①	FY2019 Forecasts			Changes	
		May 13 ②	Nov. 6 ③	Changes (③ - ②)	Year-on-Year (③ - ①)	
Net Sales	452.9	455.0	480.0	25.0 5%	27.0 6%	
Operating Income	18.6	24.5	24.5	- 0%	5.8 31%	
Ordinary Income	24.3	30.0	30.0	- 0%	5.6 23%	
Profit attributable to owners of parent	14.9	20.0	20.0	- 0%	5.0 34%	

- ✓ With respect to the forecasts for fiscal 2019, we revised the previous forecasts on May 13, taking into account the results of the first half and the latest business environments.

Year-on-Year Comparison by Segment (Full year)

Billion Yen

	FY2018 Results			FY2019 Forecasts on Nov. 6			Changes			Details of Changes to Ordinary Income
	Net Sales	Operating Income	Ordinary Income	Net Sales	Operating Income	Ordinary Income	Net Sales	Operating Income	Ordinary Income	
Environmental Management & Recycling	104.4	5.6	6.2	112.3	6.0	6.2	7.8	0.3	(0.0)	
Nonferrous Metals	221.6	0.5	4.6	218.9	8.6	12.4	(2.7)	8.0	7.7	- Rose of precious metal prices - Increment of PGM recovery - Decreasing in loss due to the lowering the book value
Electronics Materials	64.9	2.1	3.1	90.8	1.0	2.3	25.8	(1.1)	(0.8)	- Sales reduction of LEDs for smartphones
Metal Processing	92.0	6.2	6.4	87.2	5.1	5.3	(4.8)	(1.1)	(1.1)	- Demand decreasing for automobiles and smartphones
Heat Treatment	29.7	2.4	2.5	29.8	2.5	2.5	0.0	0.0	(0.0)	
Other/ Elimination	(59.9)	1.4	1.2	(59.0)	1.3	1.3	0.9	(0.1)	0.0	
Total	452.9	18.6	24.3	480.0	24.5	30.0	27.0	5.8	5.6	

Forecasts Comparison by Segment (Full year)

Billion Yen

	FY2019 Forecasts on May 13			FY2019 Forecasts on Nov. 6			Changes			Details of Changes to Ordinary Income
	Net Sales	Operating Income	Ordinary Income	Net Sales	Operating Income	Ordinary Income	Net Sales	Operating Income	Ordinary Income	
Environmental Management & Recycling	106.7	6.6	6.7	112.3	6.0	6.2	5.6	(0.6)	(0.5)	- Decreasing waste treatment volume in Southeast Asia
Nonferrous Metals	209.3	5.9	9.5	218.9	8.6	12.4	9.6	2.7	2.9	- Rose of precious metal prices - Decreasing in loss due to the lowering the book value
Electronics Materials	65.6	0.7	2.6	90.8	1.0	2.3	25.2	0.3	(0.3)	- Decreasing the income from new products
Metal Processing	91.7	6.6	6.8	87.2	5.1	5.3	(4.5)	(1.5)	(1.5)	- Demand decreasing for automobiles and smartphones
Heat Treatment	32.4	3.3	3.2	29.8	2.5	2.5	(2.6)	(0.8)	(0.7)	- Demand decreased in heat treatment processing demand
Other/ Elimination	(50.7)	1.4	1.2	(59.0)	1.3	1.3	(8.3)	(0.1)	0.1	
Total	455.0	24.5	30.0	480.0	24.5	30.0	25.0	0.0	0.0	

Assumptions and Sensitivities (FY2019 H2)

Sensitivity (Operating Income / H2)			Million yen
	Assumptions	Fluctuation	Sensitivity
Exchange rate	108.0 ¥/\$	±1 ¥/\$	230
Copper	5,700 \$/t	±100 \$/t	30
Zinc	2,500 \$/t	±100 \$/t	210
Indium	150 \$/kg	±10 \$/kg	30

* Exchange rate sensitivity; Nonferrous Metals 200 million yen and Electronics Materials 30 million yen.

Exchange Rate and Metal Prices

	FY2018			FY2019				(Ref.)
	H1 averages	H2 averages	Full year averages	Assumptions for H1	H1 averages	Assumptions for H2	Full year averages	Oct. 2019 averages
Exchange rate: (¥/\$)	110.3	111.6	110.9	110.0	108.6	108.0	108.3	108.1
Copper: (\$/t)	6,487	6,194	6,341	6,400	5,956	5,700	5,828	5,743
Zinc: (\$/t)	2,824	2,667	2,746	2,800	2,554	2,500	2,527	2,446
Indium: (\$/kg)	286	222	254	180	164	150	157	150

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.

Investments

Billion yen

	FY2017 Results			FY2018 Results			FY2019 H1 Results			FY2019 Estimation		
	Capital investment & loan	R&D investment	Total	Capital investment & loan	R&D investment	Total	Capital investment & loan	R&D investment	Total	Capital investment & loan	R&D investment	Total
Environmental Management & Recycling	8.2	0.4	8.6	6.6	0.3	7.0	6.6	0.2	6.8	15.0	0.4	15.4
Nonferrous Metals	12.3	1.2	13.6	26.4	1.3	27.7	10.0	0.3	10.3	11.0	0.9	11.9
Electronics Materials	4.6	3.4	8.1	3.8	3.9	7.7	0.8	2.1	2.9	3.5	4.5	8.0
Metal Processing	3.6	0.5	4.2	5.9	0.7	6.7	3.6	0.3	3.9	4.7	0.7	5.4
Heat Treatment	4.9	0.3	5.3	5.4	0.2	5.6	2.1	0.0	2.2	4.3	0.2	4.5
Companywide, Other	0.8	0.0	0.9	1.0	(0.1)	0.8	0.5	0.0	0.4	1.5	(0.1)	1.3
Total	34.8	6.1	40.9	49.3	6.3	55.7	23.8	2.9	26.8	40.0	6.8	46.8

(Ref.) Depreciation Expenses

	FY2017 Results	FY2018 Results	FY2019 H1 Results	FY2019 Estimation
Environmental Management & Recycling	4.3	5.3	2.6	5.6
Nonferrous Metals	4.6	4.1	1.8	4.1
Electronics Materials	2.7	2.8	1.5	3.4
Metal Processing	2.4	2.7	1.4	3.1
Heat Treatment	2.0	2.3	1.2	2.8
Companywide, Other	1.0	1.1	0.3	0.9
Total	17.2	18.6	9.0	20.2

Major investments in fiscal 2019 H1

Environmental Management & Recycling:

Non-combustible waste recycling facility

Nonferrous Metals:

Los Gatos Zinc Mine

Metal Processing:

Manufacturing facilities of Copper rolled products

Ref. Historical Data

■ Consolidated financial data

Billion yen

		FY2017					FY2018					FY2019				
		1Q	2Q	3Q	4Q	Full year	1Q	2Q	3Q	4Q	Full year	1Q	2Q	3Q	4Q	Full year
Total	Net Sales	110.1	109.1	119.3	116.1	454.7	115.1	106.6	114.5	116.5	452.9	116.2	114.5	-	-	-
	Operating Income	8.2	6.4	8.6	7.6	30.9	6.9	2.4	3.4	5.9	18.6	6.8	4.1	-	-	-
	Ordinary Income	9.0	8.1	10.4	8.6	36.3	8.5	4.2	4.0	7.3	24.3	7.6	4.7	-	-	-
	Profit attributable to owners of parent	6.1	5.5	7.4	5.4	24.6	6.0	2.8	1.7	4.2	14.9	4.8	3.0	-	-	-
Environmental Management & Recycling	Net Sales	24.3	23.9	25.1	25.8	99.3	26.3	24.8	25.2	27.8	104.4	25.8	27.6	-	-	-
	Operating Income	1.6	0.9	1.3	1.0	4.9	1.7	1.0	1.6	1.2	5.6	1.8	1.5	-	-	-
	Ordinary Income	1.7	1.2	1.6	1.1	5.7	1.9	1.3	1.6	1.3	6.2	1.5	1.5	-	-	-
Nonferrous Metals	Net Sales	50.1	52.2	58.2	57.2	217.9	58.7	50.6	54.8	57.5	221.6	58.1	49.7	-	-	-
	Operating Income	2.9	1.4	2.8	2.0	9.2	1.6	(1.4)	(1.6)	2.0	0.5	2.7	0.6	-	-	-
	Ordinary Income	3.8	2.6	3.5	2.9	13.0	2.8	(0.1)	(1.1)	3.1	4.6	3.5	1.1	-	-	-
Electronics Materials	Net Sales	23.2	17.7	20.6	16.0	77.7	17.7	15.5	17.0	14.6	64.9	19.3	24.4	-	-	-
	Operating Income	1.4	1.5	1.4	1.0	5.6	1.1	0.4	0.3	0.2	2.1	0.2	0.3	-	-	-
	Ordinary Income	1.5	1.7	1.6	1.1	6.1	1.3	0.7	0.4	0.4	3.1	0.5	0.6	-	-	-
Metal Processing	Net Sales	21.0	21.1	24.5	23.8	90.6	23.0	22.9	23.3	22.6	92.0	21.1	20.3	-	-	-
	Operating Income	1.5	1.6	2.0	2.0	7.2	1.6	1.4	1.9	1.2	6.2	1.5	0.9	-	-	-
	Ordinary Income	1.6	1.7	2.0	2.0	7.5	1.7	1.4	1.9	1.2	6.4	1.5	0.9	-	-	-
Heat Treatment	Net Sales	5.9	7.0	6.9	8.3	28.2	6.3	7.2	7.9	8.0	29.7	6.7	7.2	-	-	-
	Operating Income	0.3	0.7	0.6	0.9	2.6	0.4	0.7	0.7	0.4	2.4	0.2	0.3	-	-	-
	Ordinary Income	0.2	0.7	0.6	0.8	2.5	0.5	0.7	0.8	0.4	2.5	0.2	0.3	-	-	-
Other/ Elimination	Net Sales	(14.5)	(13.0)	(16.2)	(15.3)	(59.1)	(17.1)	(14.5)	(13.9)	(14.2)	(59.9)	(15.0)	(14.8)	-	-	-
	Operating Income	0.3	0.1	0.3	0.5	1.2	0.2	0.1	0.3	0.6	1.4	0.2	0.2	-	-	-
	Ordinary Income	0.0	0.0	0.8	0.5	1.3	0.1	0.0	0.3	0.7	1.2	0.1	0.1	-	-	-

■ Exchange rate and Metal prices

	FY2017 (average)					FY2018 (average)					FY2019 (average)				
	1Q	2Q	3Q	4Q	Full year	1Q	2Q	3Q	4Q	Full year	1Q	2Q	3Q	4Q	Full year
Exchange Rate: (¥/\$)	111.1	111.0	113.0	108.3	110.9	109.1	111.5	112.9	110.2	110.9	109.9	107.4	-	-	-
Copper: (\$/t)	5,663	6,347	6,808	6,959	6,444	6,872	6,103	6,168	6,220	6,341	6,114	5,798	-	-	-
Zinc: (\$/t)	2,598	2,962	3,234	3,422	3,054	3,114	2,534	2,630	2,704	2,746	2,763	2,345	-	-	-
Indium: (\$/kg)	186	182	239	298	226	307	266	233	210	254	173	155	-	-	-

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.