

# Fiscal 2015 Business Results

# DOWA HOLDINGS CO.,LTD.

May 12, 2016

<sup>\*</sup> Forward-looking statements made in this document, such as business forecasts, 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.

# Overview of Operating Results for FY2015

### **■** Consolidated Income Statements

billion yen

	FY2014		Year on year				
	results (A)	assumption (B)	results (C)	char (C-	_	changes (C-A)	
	(71)	(5)	(0)				, ,,
Net Sales	464.2	410.0	406.5	(3.4)	(1%)	*(57.6)	(12%)
Operating Income	39.0	35.5	35.0	(0.4)	(1%)	(4.0)	(10%)
Ordinery Income	42.0	35.0	35.0	0.0	0%	(6.9)	(17%)
Net Income	26.5	21.0	21.8	0.8	3%	(4.7)	(18%)

\*The decline in net sales was due to the effect of shifting part of transactions of silver power to contracted processing not containing silver metal prices.

■ Key points of operating results silver power to contracted processing not containing silver metal prices.							
Segment	Operating income changes (billion yen)		Details of change				
Environmental Management & Recycling	(1.0)	(14%)	<ul><li>Growth in the volume of low-contaminated PCB waste treated.</li><li>Rreduction in the number of projects regarding soil treatment.</li><li>Recycling and Southeast Asia business suffered a decline in profit.</li></ul>				
Nonferrous Metals	(0.2)	(2%)	<ul> <li>Grew with the depreciation of the yen, a turnaround in the conditions for purchasing raw materials. Metal prices decreased.</li> </ul>				
Electronic Materials	(0.7)	(9%)	<ul><li>Silver powder grew in sales.</li><li>Sales of LEDs decreased due to the inventory adjustment.</li></ul>				
Metal Processing	(0.8)	(15%)	- Income declined due to the lower prices of copper and the sluggish Sales of copper alloy strips for automobiles.				
Heat Treatment	(1.0)	(43%)	- Heat treatment facilities saw a decline in sales, reflecting sluggish demand in Japan as well as in Indonesia and Thailand.				

[Metal prices] Prices fell across the board, given a stronger dollar and growing concern over the slowdown in demand. [Foreign exchange rates] The yen/dollar rate remained in 120 yen range. The yen started to appreciate in value in Q4.

# Forecasts for FY2016

Billion yen

	FY2015 Results	FY2016 Forecasts	Change
Net Sales	406.5	385.0	(21.5)
Operating Income	35.0	29.0	(6.0)
Ordinary Income	35.0	29.0	(6.0)
Net Income	21.8	20.0	(1.8)

Lower profits expected for nonferrous and others, reflecting the further appreciation of the yen and the falling metal prices.

# FY2016 Assumptions and Sensitivities

Sensitivity (Operating Income/Year)

Million yen

	Assumptions	Fluctuation	Sensitivity
¥/\$	115.0 ¥/\$	±1 ¥/\$	380
Copper	4,800 \$/t	±100 \$/t	50
Zinc	1,800 \$/t	±100 \$/t	500
Indium	250 \$/kg	±100 \$/kg	600

<sup>\*</sup>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.

### Exchange rate and metal prices

	FY2015	Average	FY2016 As	(Ref.) April	
	H1	Full Year	H1	Full Year	2016
Exchange rate: (¥/\$)	121.8	120.1	115.0	115.0	109.4
Copper: (\$/t)	5,653	5,215	4,800	4,800	4,851
Zinc: (\$/t)	2,019	1,831	1,800	1,800	1,852
Indium: (\$/kg)	369	302	250	250	244

# Year on Year Comparison by Segment

Billion yen

	FY2	2015 Res	ults	FY20	016 Fored	casts	Change			
	Net Sales	Operating Income	Ordinary Income	Net Sales	Operating Income	Ordinary Income	Net Sales	Operating Income	Ordinary Income	
Environmental  Management &  Recycling	98.3	6.3	6.1	97.0	6.8	6.8	(1.3)	0.4	0.6	
Nonferrous Metals	214.9	13.3	13.9	193.0	7.2	7.6	(21.9)	(6.1)	(6.3)	
Electronic Materials	48.3	8.0	8.2	44.0	5.8	5.9	(4.3)	(2.2)	(2.3)	
Metal Processing	77.4	4.9	5.0	73.0	6.1	6.2	(4.4)	1.1	1.1	
Heat Treatment	24.1	1.3	1.1	27.5	2.4	2.3	3.3	1.0	1.1	
Other/ Elimination	(56.5)	1.1	0.4	(49.5)	0.7	0.2	7.0	(0.4)	(0.2)	
Total	406.5	35.0	35.0	385.0	29.0	29.0	(21.5)	(6.0)	(6.0)	

# Investment

Billion yen

	FY2013 Results			FY:	FY2014 Results			FY2015 Results			FY2016 Forecasts		
	Capital and stock investment	R&D investment	Total	Capital and stock investment	R&D investment	Total	Capital and stock investment	R&D investment	Total	Capital and stock investment	R&D investment	Total	
Environmental Management & Recycling	5.6	0.4	6.0	10.2	0.3	10.6	9.1	0.3	9.4	9.0	0.4	9.4	
Nonferrous Metals	3.0	0.9	3.9	2.4	2.7	5.1	5.2	4.5	9.7	9.0	2.4	11.4	
Electronic Materials	3.1	2.6	5.8	2.2	2.6	4.8	3.8	2.9	6.8	4.0	3.1	7.1	
Metal Processing	2.8	0.4	3.3	2.1	0.5	2.7	2.8	0.5	3.4	4.0	0.6	4.6	
Heat Treatment	2.1	0.3	2.4	4.3	0.3	4.6	3.0	0.4	3.5	3.0	0.3	3.3	
Companywide, Other	2.0	0.0	1.9	0.4	(0.1)	0.3	0.7	(0.1)	0.5	2.0	0.0	2.0	
Total	18.8	4.6	23.5	21.8	6.5	28.4	24.9	8.6	33.6	31.0	6.9	37.9	

(Ref.) Depreciation Expenses

	FY2013 Results	FY2014 Results	FY2015 Results	FY2016 Forecasts
Environmental Management & Recycling	4.7	4.6	4.7	5.1
Nonferrous Metals	4.3	3.4	2.9	3.9
Electronic Materials	2.6	2.5	2.4	3.0
Metal Processing	2.2	2.2	2.0	2.3
Heat Treatment	1.7	1.8	2.0	2.1
Companywide, Other	0.4	0.9	0.9	1.1
Total	16.2	15.5	15.1	17.7

### Major investments for FY2015

Environmental Management & Recycling:

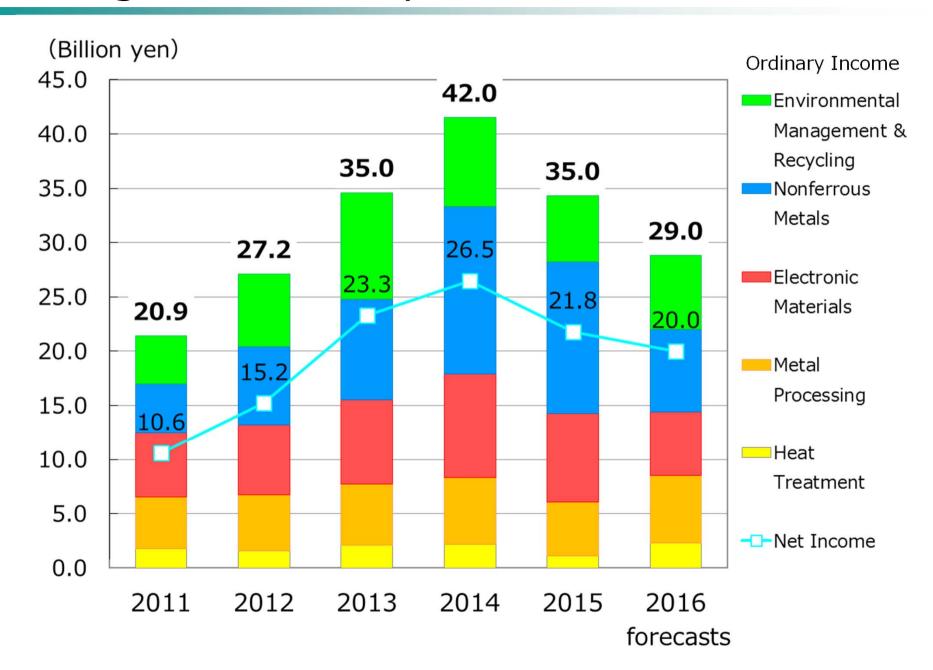
Building a new furnace for low-contaminated PCB waste treatment

Nonferrous Metals:

Mine development in Mexico

Build/renew zinc-related facilities, including a roasting furnace

# Changes in ordinary income and net income



# (Supplement) Status of Prospecting Projects

billion Yen										
	FY2013	FY2014	FY2015	FY20	l6 assum	ption	FY2017	FY2018	On and after FY2019	
				H1	H2	total	112017	112010		
Alaska (Palmer)	Pros	peting (inc	urring a to	tal amou	nt of \$22	!M)	(F/S)→ (Development/certification and licensing) → (Start of production)			
Operating expenses (prospecting expenses) *1	0.3	0.8	0.7	0.2	0.5	0.7	Hundreds of million yen/year			
*1 All expenses are consolida	ited as the	investment	ratio is mo	ore than 5	50%.				1	
Mexico (Los Gatos)		F/S (ir	ncurring a t	otal amo	unt of \$!	50M)	(Developmen	t/certification a → (S	and licensing) tart of production)	
Non-operating expenses *2 (Equity in losses of affiliates)	-	-	1.6	0.8	0.2	1.0				
Extraordinary loss *3 (Loss on valuation of investment securities)	-	1.2	1.5	-	-	-	<ul><li>Prospecting projects make steady progress.</li><li>Mexico (Los Gatos);</li></ul>			
*2 Investment ratio 15% or	more (201	5.2Q∼): Ec	uity metho	d applied			,	ent the decisi	on of mine	
*3 Investment ratio less tha	n 15% ( $\sim$ 2	:015.1Q): T	reated as	shares in	general o	company	·	nent in FY20		
■Impact on each profit stag										
Operating Income	(0.3)	(0.8)	(0.7)	(0.2)	(0.5)	(0.7)				
Ordinary Income	(0.3)	(0.8)	(2.3)	(1.0)	(0.7)	(1.7)				
Net Income	(0.3)	(2.0)	(3.8)	(1.0)	(0.7)	(1.7)				

# Challenges in Our Business and Focus for the Futures

### **Environmental Management & Recycling**

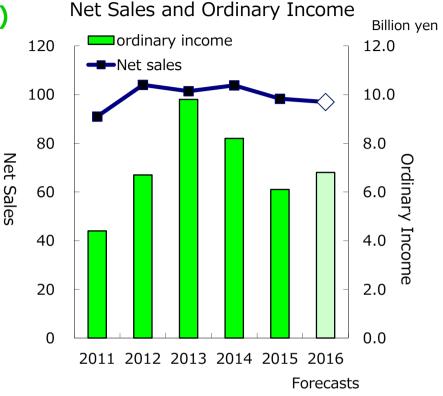
### **Outlook for FY2016 (YoY Comparison)**

- Waste treatment
  - Net Sales: 100% for H1 and 105% for H2 (Increase in the collection of low-contaminated PCB waste.)
- Soil remediation

Net Sales: 100% for H1 and 130% for H2 (Projects will increase due to the activation of large public investments, etc.)

Recycling

Net Sales: 85% for H1 and 90% for H2 (Emissions of recycling materials are weakening due to a fall in metal prices.)



### **Future actions**

- Waste treatment Increase in treatment of low-contaminated PCB waste through the launch of new incinerator in Akita.
  - Expansion of treatment of non-industrial waste and the aggregate manufacturing business (MELTEC IWAKI).
- Soil remediation
- Promotion of on-site remediation service for naturally contaminated soil remediation based on unique method.

Recycling

- Increase in the collection of metal recycling materials from overseas such as the United State and Asia.
- **Southeast Asia**
- Expansion of waste treatment facilities and the promotion of efforts to expand treatment menus.

# **Expansion of the Waste Treatment Business in Southeast Asia**

**■** Expansion of controlled landfills

### **Myanmar**

•Launched in December 2015 and start up in FY2016.

### **Indonesia and Thailand**

- Selection of commercial land to build and expand facilities.
- Onset of an environmental impact assessment.

### **■ Expansion of treatment menus**

### **Singapore**

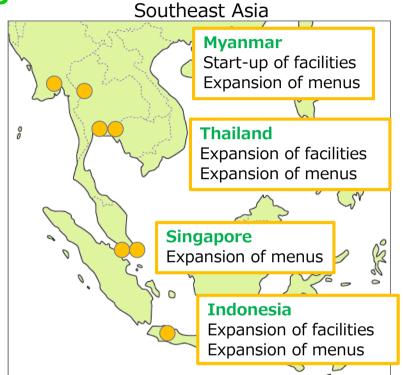
- •Start of construction of a new incinerator to expand incineration treatment capacity.
- → Incorporating increasing solid hazardous waste from the pharmaceutical and medical industries.

### **Thailand**

•New investment in a Thai company while looking at the possibility of expanding the waste treatment business

### **Indonesia and Myanmar**

·A feasibility assessment of incineration treatment at existing bases is underway.



Future business development in

### **Nonferrous Metals**

### **Outlook for FY2016 (YoY Comparison)**

### Copper

Sales volume: 95% for H1 and 90% for H2 A slight fall in sales for domestic construction, etc.)

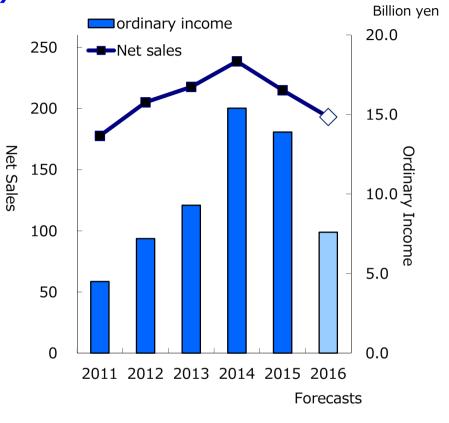
### PGM

Collection volume of raw materials: 115% for H1 and 115% for H2 (Growth in collection in North America, Europe and elsewhere outside Japan)

### Zinc

Sales volume: 105% for H1 and 100% for H2 (Weak sales for construction and flat sales for automobiles)

### Net Sales and Ordinary Income



### **Future actions**

### ■ Precious metals and copper

- Enhance the ability to treat impurities and the ability to collect byproduct metals at Kosaka Smelting & Refining.
- PGM Construct a new incinerator to increase collection from overseas and expand treatment capacity.
- Zinc

   Strengthen the competitiveness of Akita Zinc by increasing zinc production and reducing the consumption rates of energy.
- Resources Promote mine projects in the United States and Mexico.

# Strengthening the foundation for the Smelting & Refining Business

### ■ Strengthening the competitiveness of Akita Zinc

- •Building or renewing important facilities such as roasters in a phased manner.
- •Expanding the collection and treatment of zinc recycling materials (up 10% year on year).
- •Cutting costs by reducing the consumption rates of energy such as electricity.
- •Increasing zinc production (22,000 tons in FY2017).

# ■ Increasing the earnings power of Kosaka Smelting & Refining and strengthening the complex function

Increasing input by expanding production at Akita Zinc.

Increasing diversification and treatment of recycling materials

Increasing the impurities load at Kosaka



•Increasing an ability to treat impurities by strengthening refining process.



- •Expanding the collection of metals such as tin and precious metals.
  - ⇒ Strengthening the complex function with Akita Zinc + Expanding the earnings power by increasing metal collection.

### **Electronic Materials**

### **Outlook for FY2016 (YoY Comparison)**

### Semiconductors

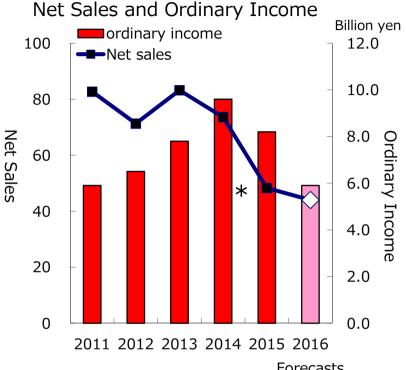
Sales volume of LFDs: 75% for H1 and 115% for H2 (Correction of products for smartphones will continue.)

### Electronic materials

Sales volume of silver powder: 110% for H1 and 115% for H2 (Sales of products for new forms of energy will remain solid centering on overseas markets.)

### **Magnetic materials**

Net Sales for recording materials: 95% for H1 and 110% for H2 (Sales of products for data tapes for backup will remain firm.)



\* The sales drop for fiscal 2015 is due partly to a partial shift in silver powder

transactions to contracted processing not involving silver metal prices.

### **Forecasts**

### **Future actions**

### Semiconductors

- Expand applications to healthcare equipment with more sophisticated LEDs for sensors.

### Electronic materials

- Increase productivity for firm demand for silver power and expanding sales of new conductive materials.

### Magnetic materials

- Strengthen the production system by expanding capacity for recording materials for data tapes.

### New development

- Further improve the properties of new products where customer certification is underway and respond with samples.

# **New Development Initiatives**

### **■** Electrode materials for fuel cells

Certified products are increasing due to a steady improvement in property.

→ Strengthening a production system in response to the start-up of the market.

# Development of new conductive materials

Downsizing of electronic components Thinner electrodes with thinner film Expansion of applications

Diversification of requirements for conductive materials

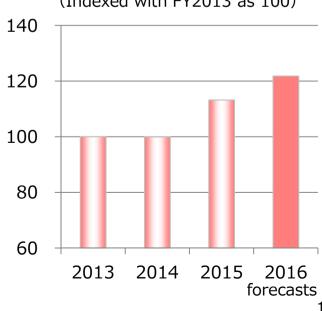
Responding to diverse needs by using an appropriate manufacturing method and combining composition, powder size and shape.

- → Improving properties and developing applications for electronic circuit components and next-generation touch panels, etc.
- ⇒ Accelerate development for growth markets and achieve early commercialization.

New conductive materials (alloy power for capacitors)



Trends in R&D expenses (Indexed with FY2013 as 100)



### **Metal Processing**

### **Outlook for FY2016 (YoY Comparison)**

### Copper rolled products

Sales volume: 105% for H1 and 100% for H2 (Sales of products for automobiles will remain generally firm, and applications for PC and smartphones will expand.)

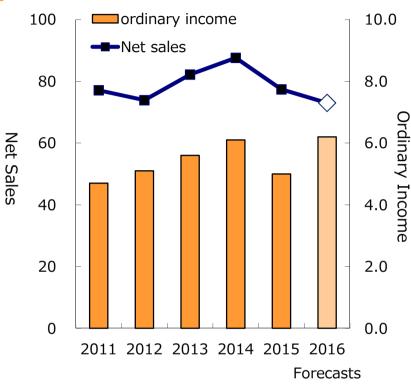
### Electroplating

Processing sales: 105% for H1 and 100% for H2 (Sales of products for in-vehicle applications will be firm, mainly overseas)

### Metal-ceramic substrates

Net Sales: 80% for H1 and 120% for H2 (Products for industrial machinery and rail transportation will recover in the second half.)

### Net Sales and Ordinary Income



### **Future actions**

### Copper rolled products

- Develop and boost sales of high performance copper alloys for hybrid cars and smartphones.
- Start mass production at a press working plant in Taiwan and expand sales to the China markets

### Electroplating

- Build a new plant in Mexico and improve productivity and production in Japan and Thailand.
- Develop and boost sales of new plating for high voltage terminals of hybrid cars.

### Metal-ceramic substrates

- Expand in-vehicle applications of new small and light products with high radiation performance.

# **Expanding Sales of DOWA Metanix's Products**

### **■** For smartphones

- ·Smaller and thinner mounted parts
- Sophistication of products of Chinese makers
- Expanding sales of high performance copper alloys combining thinness and strength
- •Improving delivery responsiveness by strengthening processing at a base in China
- Developing a new alloy to meet new needs such as high-speed charging

### **■** For in-vehicle equipment

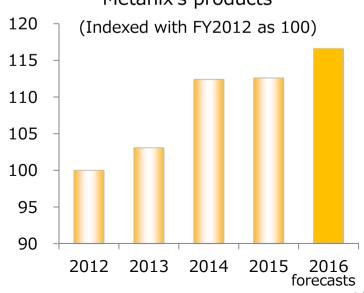
- Increase in the number of mounted parts
- Increase in in-vehicle information volume
- ⇒ Increasing needs for high conductive materials

•Aim for the standard adoption of DOWA Metanix's products, offering a good balance between conductive property and strength.

Rolling machine of DOWA Metanix



Trends in sales volume of DOWA Metanix's products



### **Heat Treatment**

### **Outlook for FY2016 (YoY Comparison)**

### Industrial furnaces

Net Sales: 100% for H1 and 130% for H2

### Heat Treatment

Net sales: 105% for H1 and 110% for H2

(For automobiles: Sales will recover in Japan and will moderately increase overseas, mainly in North America, China and India.

For construction machinery: Sales will remain weak in both Japan and overseas.)

### **Future actions**

### Overseas business

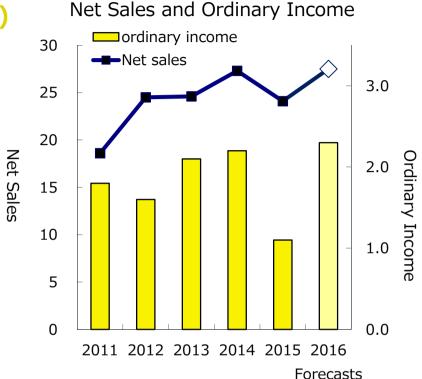
- Develop customers and boost sales in growth areas such as India, the United States and Mexico.
- Beginning of operation for a heat treatment processing plant in Mexico and launch the maintenance business in earnest.
- Strengthen the maintenance business by promoting local procurement of parts in Southeast Asia.

### Domestic business

- Strengthen the function of Hamamatsu-Kita Plant and integrate bases corresponding to market trends.

### R&D

- Commercialize compact heat treatment equipment and develop new surface treatment technologies.



1 Orccast.

# **Expanding the Heat Treatment Business in India**

Strengthening the heat treatment processing business

### **Bangalore**

- Construction of a new plant and the introduction of equipment began.
- Production capacity of Existing plant increased.

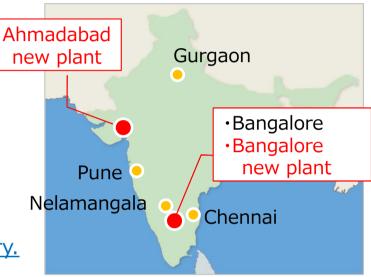
### **Ahmadabad**

- Construction of a new plant began.
- ⇒ Respond to increasing demand for automobiles in India by expanding capacity and areas in that country.

### Strengthening the industrial furnace business

- Enhancing the product lineup through alliances, etc.
   Manufacturing and sales of an aluminum melting furnace began.
- Expanding exports of products and maintenance parts
- ⇒ <u>Strengthening its function as a global manufacturing</u> base for heat treatment equipment.

Bases in India (Toward a 7-base system in India)



Industrial furnaces built by India

