

Business Results and Progress of Key Measures

First Half of FY2020 (FY Ending March 2021)

DOWA HOLDINGS CO.,LTD.

November 13, 2020

Results for FY2020/H1 (1) Overview of Results

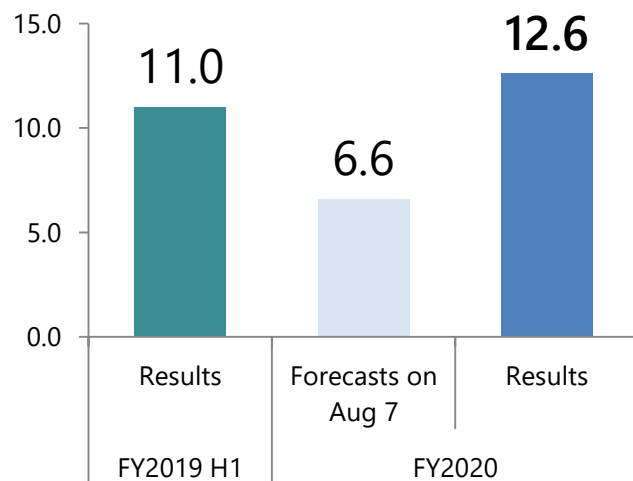
Billion yen (Amounts less than 100 million yen are omitted.)

	FY2019 H1 Results A	FY2020 H1		Changes			
		Forecasts on Aug 7 B	Results C	Year-on-Year (C - A)		From Forecasts (C - B)	
Net Sales	230.7	227.5	252.4	21.6	9%	24.9	11%
Operating Income	11.0	6.6	12.6	1.5	14%	6.0	91%
Ordinary Income	12.4	3.4	9.3	(3.1)	-25%	5.9	174%
Profit attributable to owners of parent	7.9	(1.0)	1.6	(6.3)	-80%	2.6	-

✓ Results for the first half of FY2020 exceeded the August 7 forecasts significantly.

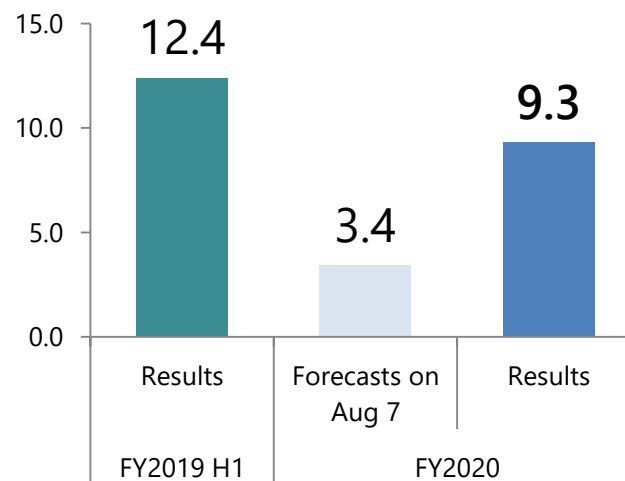
Changes in operating income

Billion yen



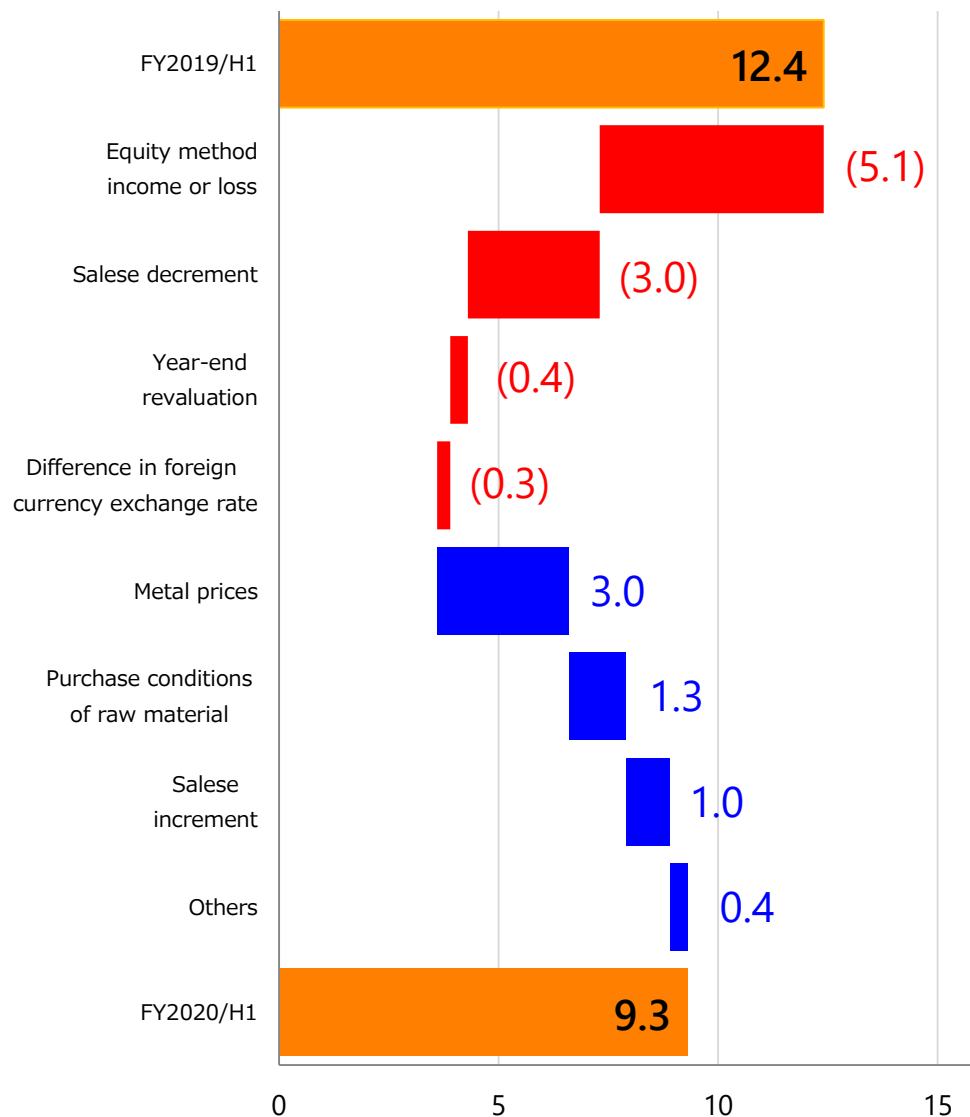
Changes in Ordinary Income

Billion yen



Results for FY2020/H1 (2) Factor Analysis of Ordinary Income

Billion yen (Amounts less than 100 million yen are omitted.)



Main factors for change

- Equity method affiliates' profits decreased year on year.
- Sales of automobile-related products and services declined.
- A year-end valuation loss was recorded due to a rise in metal prices.
- Revenue in the US dollar decreased due to a strong yen.
- Prices increased for both precious metals and base metals.
- Purchase conditions for zinc raw materials (T/C) improved.
- Demand remained solid for Environmental management & recycling segment and Electronic materials segment.

Profit declined 3.1 billion yen year on year.

Profit decreased due to lower profits posted by equity method affiliates and a decline in demand for automobile-related products and services.

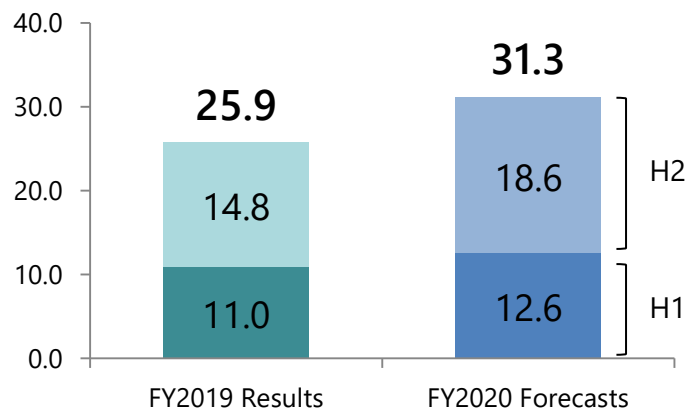
FY2020 Full-year (1) Forecasts

Billion yen (Amounts less than 100 million yen are omitted.)

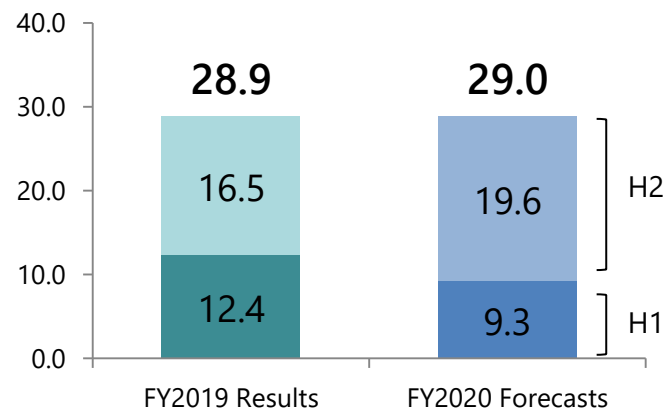
	FY2019 Results	FY2020 Forecasts	Changes	
Net Sales	485.1	563.6	78.4	16%
Operating Income	25.9	31.3	5.3	21%
Ordinary Income	28.9	29.0	0.0	0%
Profit attributable to owners of parent	17.3	12.0	(5.3)	-31%

- ✓ Net sales and operating income are expected to exceed the previous year's results on a full-year basis.

■ Changes in Operating Income Billion yen



■ Changes in Ordinary Income Billion yen



FY2020 Full-year (2) Forecasts by Segment

Billion yen (Amounts less than 100 million yen are omitted.)

	FY2019 Results			FY2020 Forecasts			Changes		
	Net Sales	Operating Income	Ordinary Income	Net Sales	Operating Income	Ordinary Income	Net Sales	Operating Income	Ordinary Income
Environmental Management & Recycling	112.1	7.2	6.9	116.1	7.5	7.1	3.9	0.2	0.1
Nonferrous Metals	227.2	10.0	12.2	263.6	16.8	20.9	36.3	6.7	8.6
Electronics Materials	98.2	1.0	2.4	153.3	2.2	3.2	55.0	1.1	0.7
Metal Processing	82.3	5.1	5.1	75.5	3.2	3.6	(6.8)	(1.9)	(1.5)
Heat Treatment	27.9	1.2	1.2	24.8	0.7	0.6	(3.1)	(0.5)	(0.6)
Other/ Elimination	(62.8)	1.3	1.0	(69.6)	0.9	(6.3)	(6.8)	(0.4)	(7.4)
Total	485.1	25.9	28.9	563.6	31.3	29.0	78.4	5.3	0.0

FY2020 Full-year (3) Forecasts (Assumptions and Sensitivities)

Sensitivity (Operating Income / H2)			Million yen
	Assumptions	Fluctuation	Sensitivity
Exchange rate	105.0 ¥/\$	±1 ¥/\$	260
Copper	6,500 \$ / t	±100 \$ / t	20
Zinc	2,400 \$ / t	±100 \$ / t	240
Indium	160 \$ / kg	±10 \$ / kg	30

* Exchange rate sensitivity; Nonferrous Metals 230 million yen and Electronics Materials 30 million yen.

Foreign-exchange rate and Metal Prices

	FY2019			FY2020			(Ref.)
	H1 Averages	H2 Averages	Full Year Averages	H1 Averages	H2 Assumptions	Full Year Assumptions	Oct. 2020 Averages
Exchange rate: (¥/\$)	108.6	108.8	108.7	106.9	105.0	106.0	105.3
Copper: (\$/t)	5,956	5,763	5,860	5,931	6,500	6,216	6,703
Zinc: (\$/t)	2,554	2,256	2,405	2,150	2,400	2,275	2,442
Indium: (\$/kg)	164	149	156	147	160	154	171

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.

Impact of COVID-19 by segment

Environmental Management & Recycling (Waste Treatment)

FY2020 Ordinary Income *

H1	H2
<p>1.8 billion yen</p> <p>Year on Year: -13%</p>	<p>1.8 billion yen</p> <p>Year on Year: 34%</p>

* Total of the waste treatment business in Japan and Southeast Asia

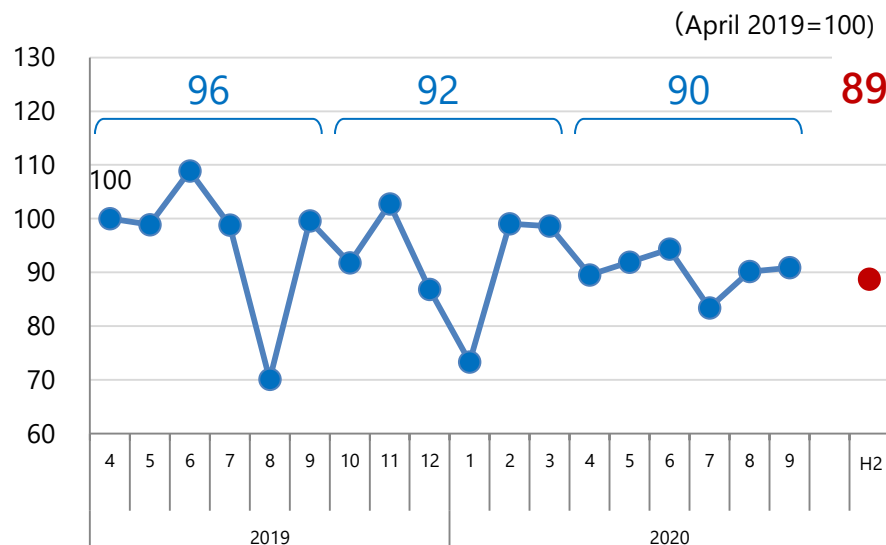
Collection/Orders

- In Japan, one-shot orders partly compensated for the deterioration of business caused due to automobile-related customers reducing their production.
- In Southeast Asia, orders decreased due to sluggish overall economic conditions.

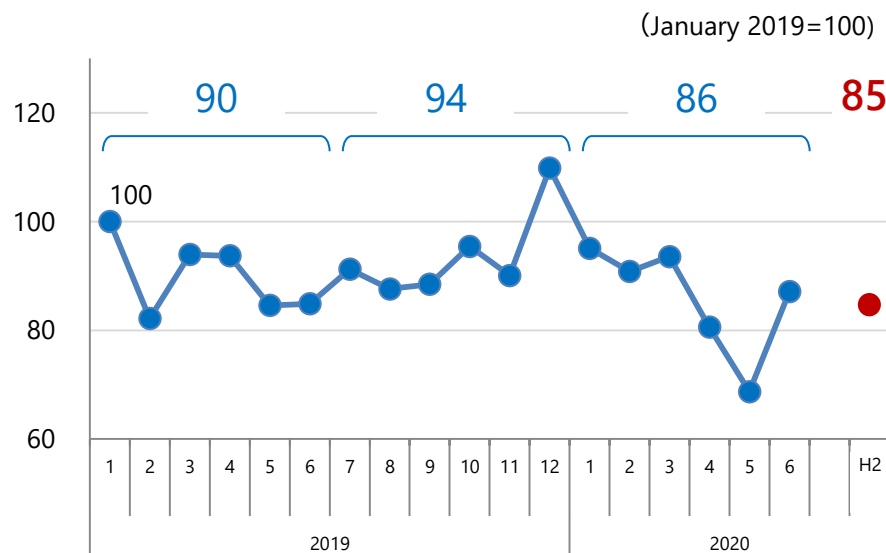
Operation

- Not affected in Japan and Southeast Asia.
- There was a delay in the progress of new facility construction projects in Southeast Asia chiefly due to entry restrictions.

Volume of treated waste (Japan)



Orders received (Southeast Asia) *



*Local closing month basis, consolidated results reflected 3 months after the above.

Environmental Management & Recycling (Recycling)

FY2020 Ordinary Income *	
H1	H2
<p>1.2 billion yen Year on Year: 16%</p>	<p>1.2 billion yen Year on Year: -9%</p>

*For the recycling business only

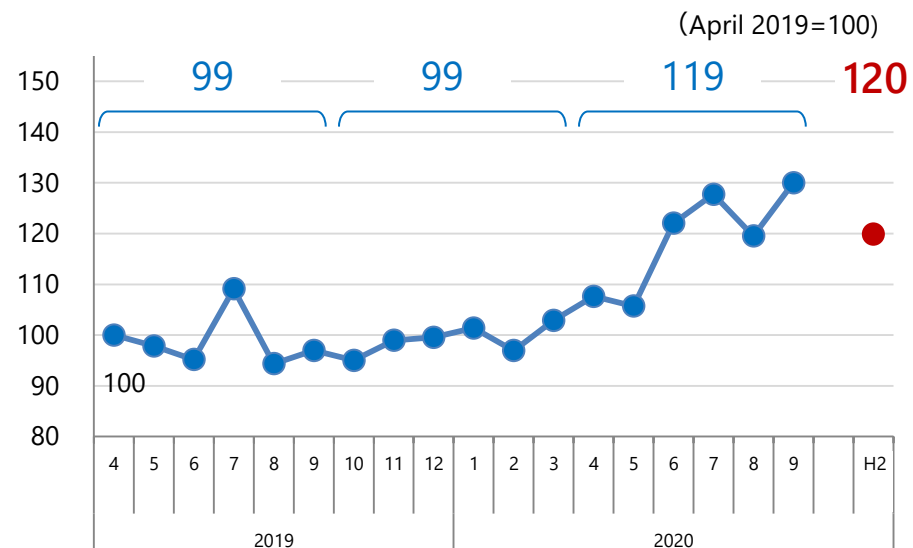
Collection

- The volume of used home electronics appliances recycled increased because the business was not seriously affected by COVID-19 and there was a rise in replacement demand.
- With respect to the recycling of automobiles, efforts were made for the collection of waste plastics because the impact of decline in the number of new cars sold domestically started gradually.

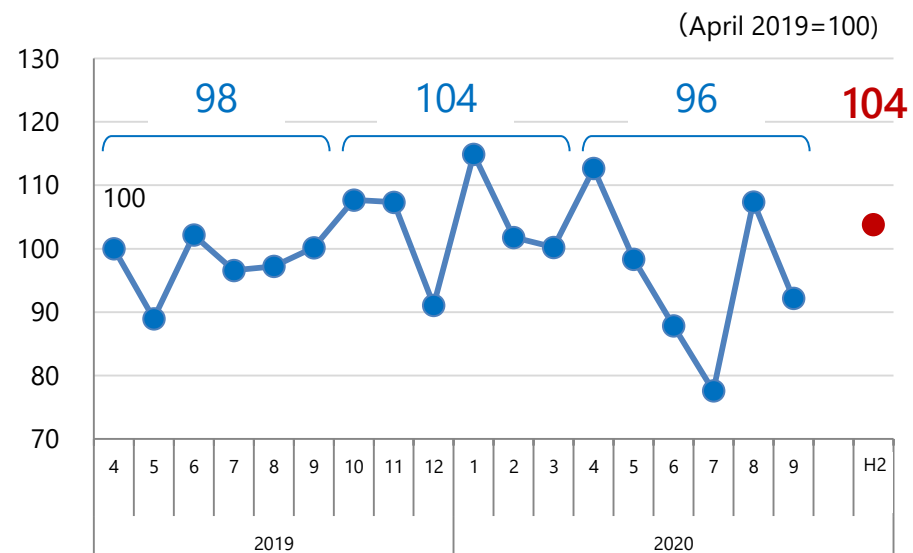
Operation

- No particular impact.

Volume of recycled used home electronics appliances



Volume of automobiles recycling business



Nonferrous Metals

FY2020 Ordinary Income

H1

H2

8.6 billion yen

Year on Year: 84%

12.2 billion yen

Year on Year: 62%

Sales

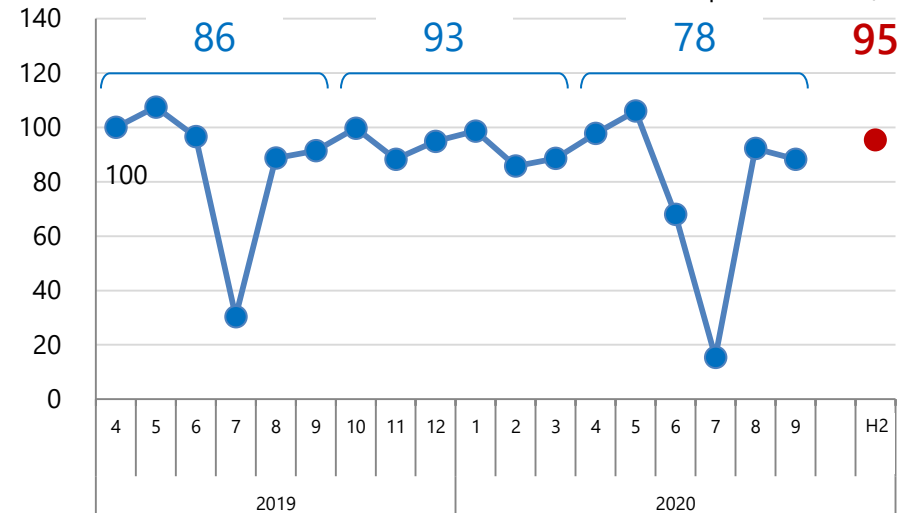
- Zinc demand declined for automobiles and building materials.
- Reflecting the recovery of automobile production and sales, demand is expected to pick up again in H2 for relevant metals, including zinc and copper.

Operation

- Procuring certain concentrates and recycling materials was difficult temporarily, but the situation has not affected the operation.

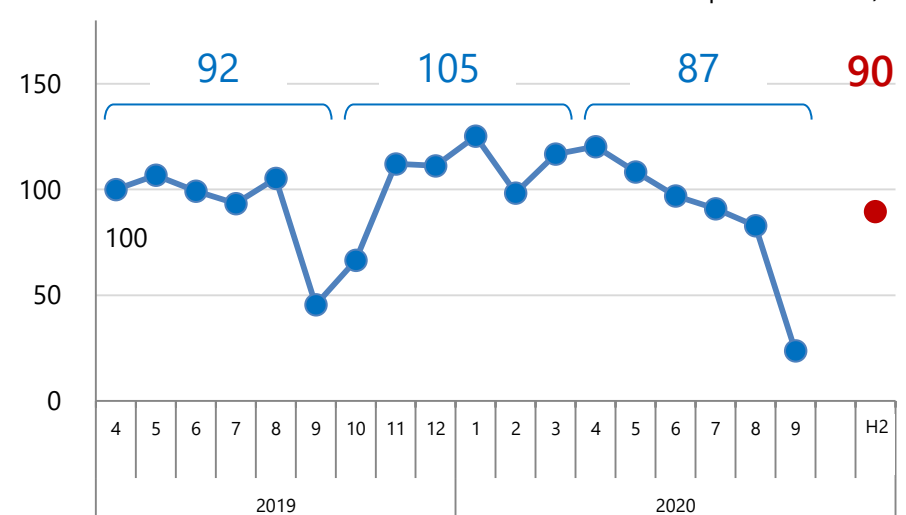
Volume of zinc produced

(April 2019=100)



Volume of gold produced

(April 2019=100)



Electronics Materials

FY2020 Ordinary Income

H1	H2
<p>1.6 billion yen</p> <p>Year on Year: 33%</p>	<p>1.5 billion yen</p> <p>Year on Year: 27%</p>

Sales

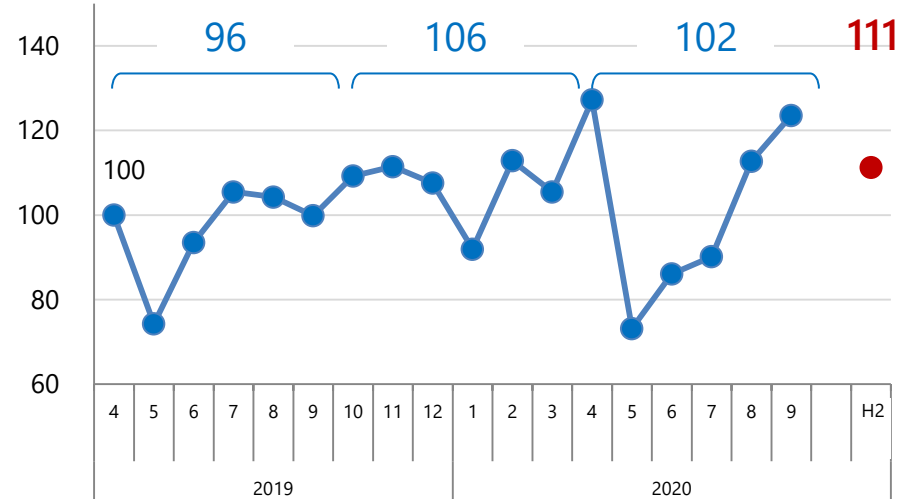
- Demand for silver powder turned upward in June and thereafter due to Chinese and Southeast Asian cell makers recovering their operation.
- Sales of LED for blood oxygen measuring devices rose.
- Sales of new products expanded as anticipated in general.

Operation

- No particular impact.

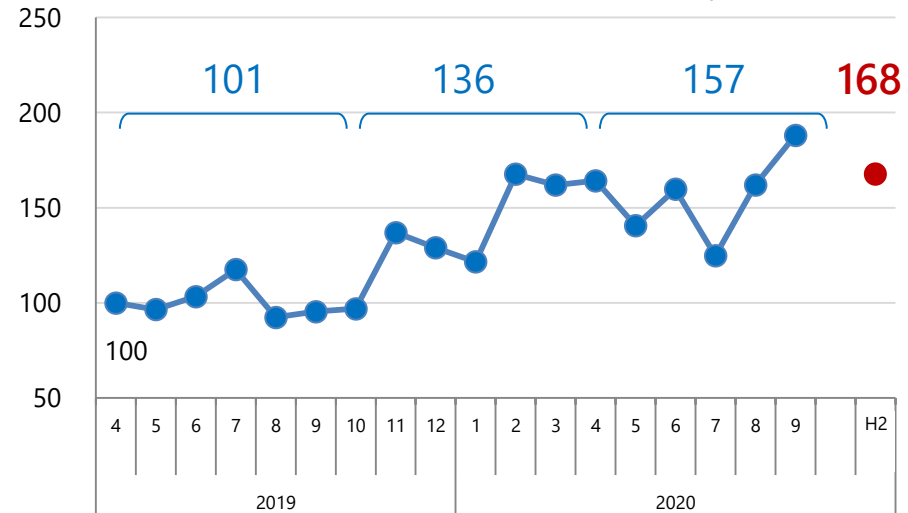
Volume of silver powder sold

(April 2019=100)



Income due to the introduction of new products

(April 2019=100)



FY2020 Ordinary Income	
H1	H2
<p>0.6 billion yen Year on Year: -72%</p>	<p>2.9 billion yen Year on Year: 8%</p>

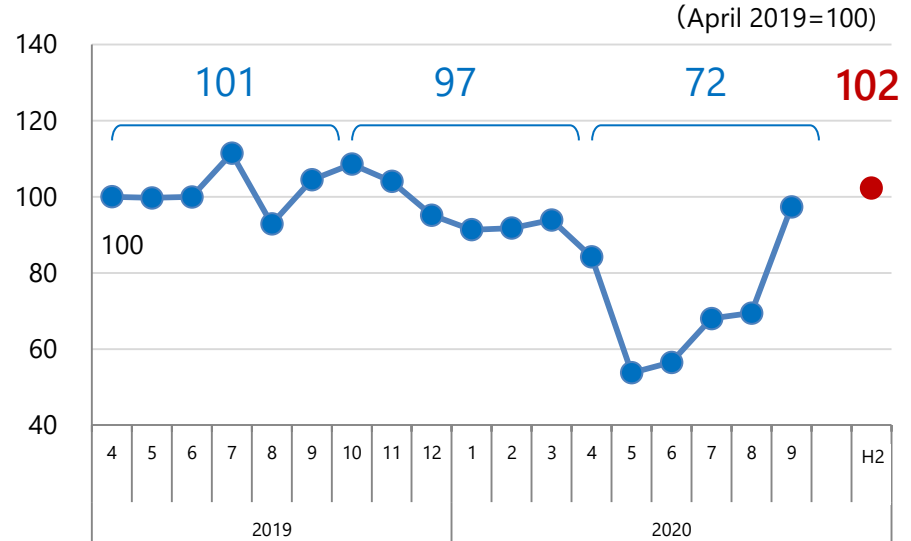
Sales

- Demand for copper rolled products for automobiles, which had declined from the beginning of the fiscal year, was on a recovery path in June.
- Orders for copper rolled products for electronic components were on a solid trend against the backdrop of strong demand for 5G devices.

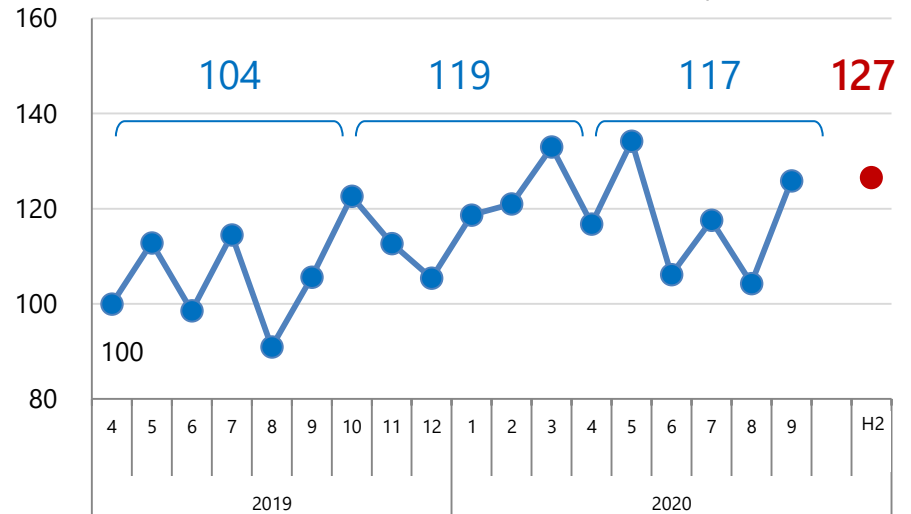
Operation

- The operation rate of copper rolled products for automobiles began to rise in 2Q.
- There was a delay in the establishment of a new facility in China.

Volume of sales of copper rolled products (for automobiles)
 (April 2019=100)



Volume of sales of copper rolled products (for electronic components)
 (April 2019=100)



Impact of COVID-19 (6)

Heat Treatment

FY2020 Ordinary Income

H1

H2

(0.7) billion yen
Year on Year: (1.3) billion yen

1.3 billion yen
Year on Year: 87%

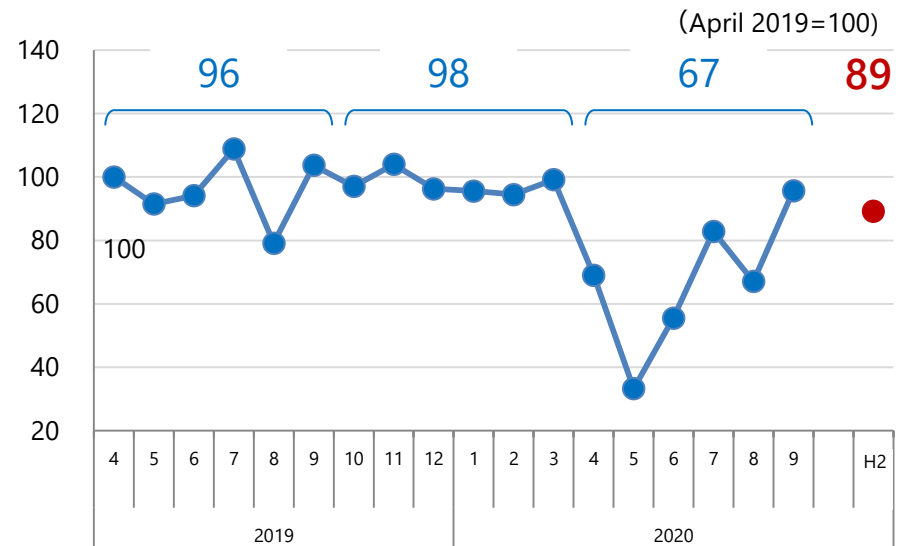
Sales

- Orders started to plunge in March due to lockdowns in many countries and a decline in the number of cars produced globally.
- Orders hit the bottom during the period from April to May, and thereafter, countries including China, the United States, Japan and India were on a recovery path.

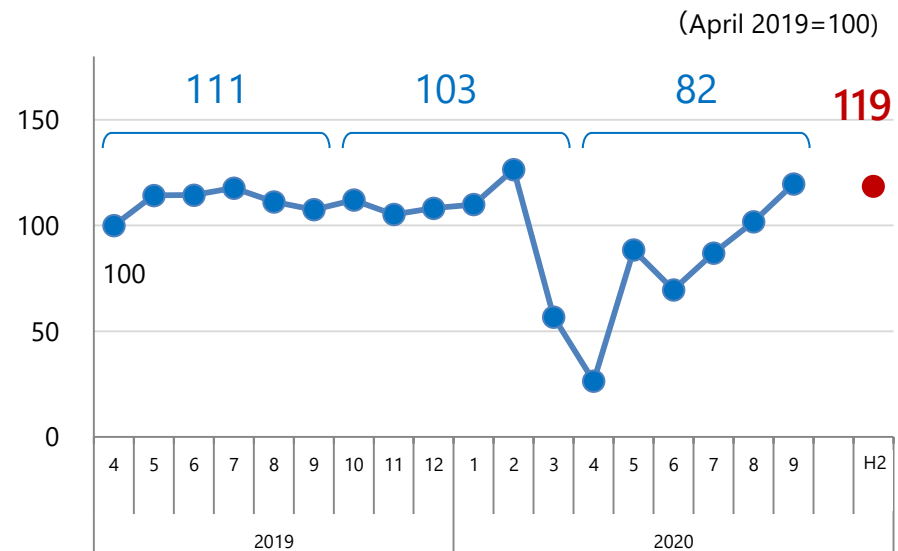
Operation

- The operating rate of the Group's facilities dropped significantly in both Japan and overseas in 1Q. However, it started to recover in 2Q in sync with the growth of demand.

Volume of carburizing treatment (Japan)



Volume of carburizing treatment (Overseas)



Summary

1. Summary

- Environmental management & recycling and Electronics materials showed strong performances in H1 and will remain solid in H2.
- Nonferrous metals recorded a significant year-on-year increase in profit thanks to a rise in metal prices.
- Demand for the Metal processing and the Heat treatment businesses, which heavily relies on automobile-related products, declined in 1Q, but recovered in 2Q, providing an indication that the recovery of demand will be more certain in H2.

⇒ The Group will reduce the impact of COVID-19 by leveraging its original business portfolio and will project an ordinary income of 29.0 billion yen, which is almost equal to the year-ago level.

2. Future policy

- There is no change in the policy of focusing on automobiles, information and communication, the environment and energy, and healthcare that were defined as growth markets in the Midterm Plan 2020.
- The Group is working on measures whose implementation has been behind schedule. Looking ahead to fiscal 2021, the final year of the Midterm Plan 2020, it will facilitate the implementation of these measures and strive to achieve results.

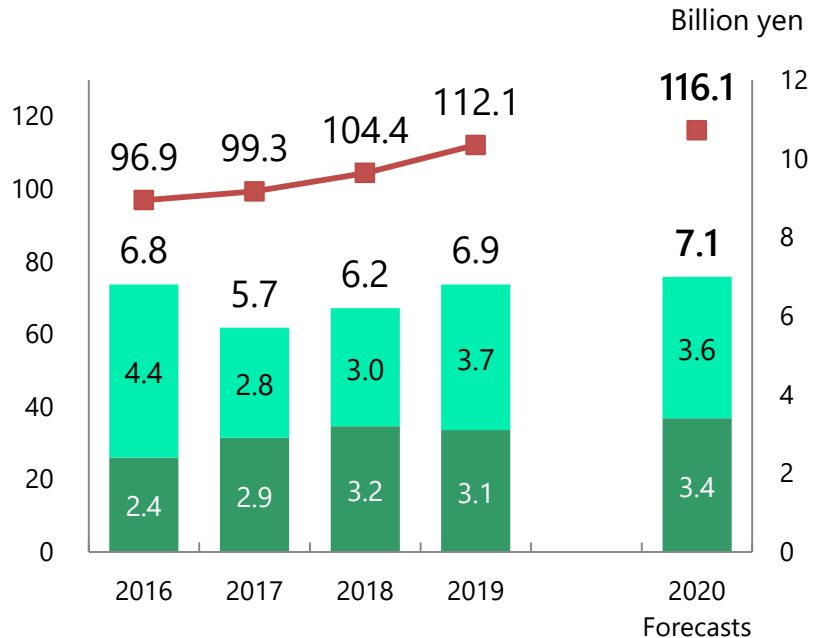
Progress of Key Measures in Each Segment

Business Overview

Business Environment (FY2020/H2)

- Waste: The volume of waste generated will remain unchanged in Japan. It will decrease in Thailand, Indonesia and Singapore.
- Recycling: The volume of recycling materials generated and that of used home electrical appliances generated will remain unchanged from H1. There is a sign of recovery in the quantity of decommissioned vehicles.

Net Sales & Ordinary Income



■ ordinary income in H2 ■ ordinary income in H1 ■ Net sales

《Major Product Trends》

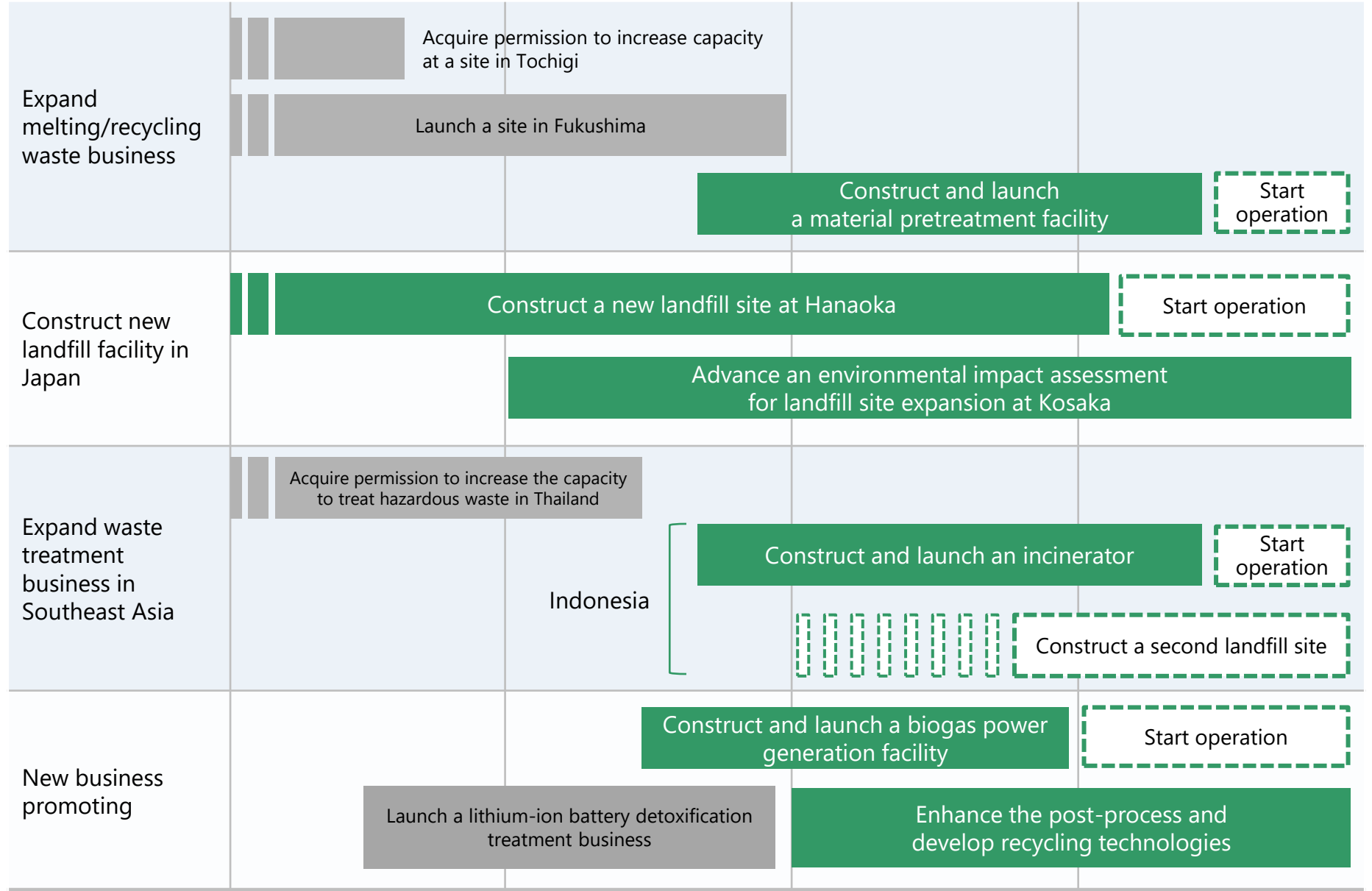
(FY2019/H1 = 100)

	FY2019		FY2020	
	H1	H2	H1	H2
Intermediated Waste Treatment Volume in Japan	100	97	95	94
Treatment Volume in Melting and Recycling business	100	96	103	108
Waste Treatment Amount in Southeast Asia	100	100	120	121
Treatment Volume in Electric Equipment Recycling business	100	106	95	94

Overview of FY2020/H2 (comparison with H1)

- In the waste treatment business, the treatment volume will decrease due to the increase in the number of days for periodic maintenance, while unit prices will remain at the same level as in H1.
- In the melting/recycling waste business, the treatment volume is projected to increase.
- In the soil remediation and the recycling businesses, profit will be at the same level as in H1.
- In Southeast Asia, profit will decline from the level in H1 due to a decrease in the volume of waste to be collected.

Progress of Key Measures in Midterm Plan



New business development in Japan

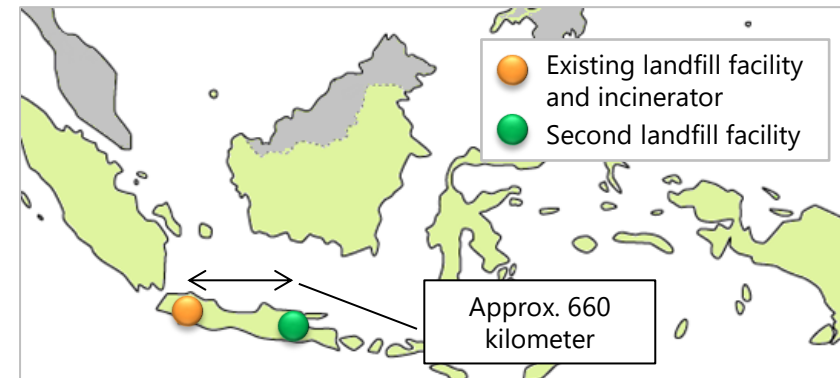
- Expansion of the melting/recycling waste business
 - A pre-treatment facility will be opened in Kanagawa in H2 of FY2021.
 - The operating rate and treatment volume of sites in Tochigi and Fukushima will be raised.
- Biogas power generation business in Okayama using food waste as raw materials
- Non-inflammable waste recycling business in Fukushima



Positioning of pretreatment facilities in the melting/recycling waste business

Business expansion in Indonesia

- Incinerator: Operation will start in H2 of FY2021
 - The toxic waste treatment menu will be increased.
- Second landfill facility: Operation will start in 1Q of FY2022.
 - Efforts will be made to acquire more orders with the operation of two landfill facilities.

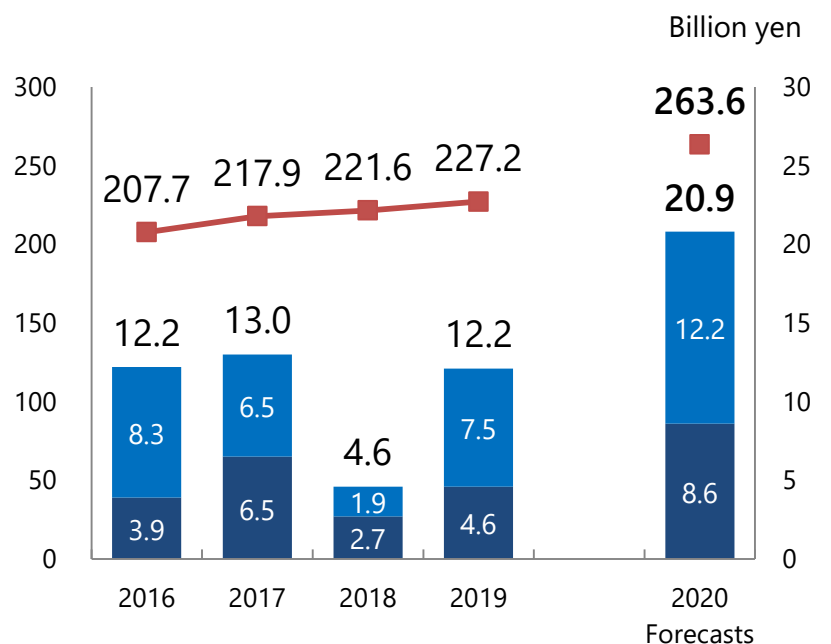


Business Overview

Business Environment (FY2020/H2)

- Metal prices, including those of precious metals and base metals, are assumed to be higher than average in H1.
- Demand for metals, such as copper and zinc, shows signs of recovery.

Net Sales & Ordinary Income



《Major Product Trends》

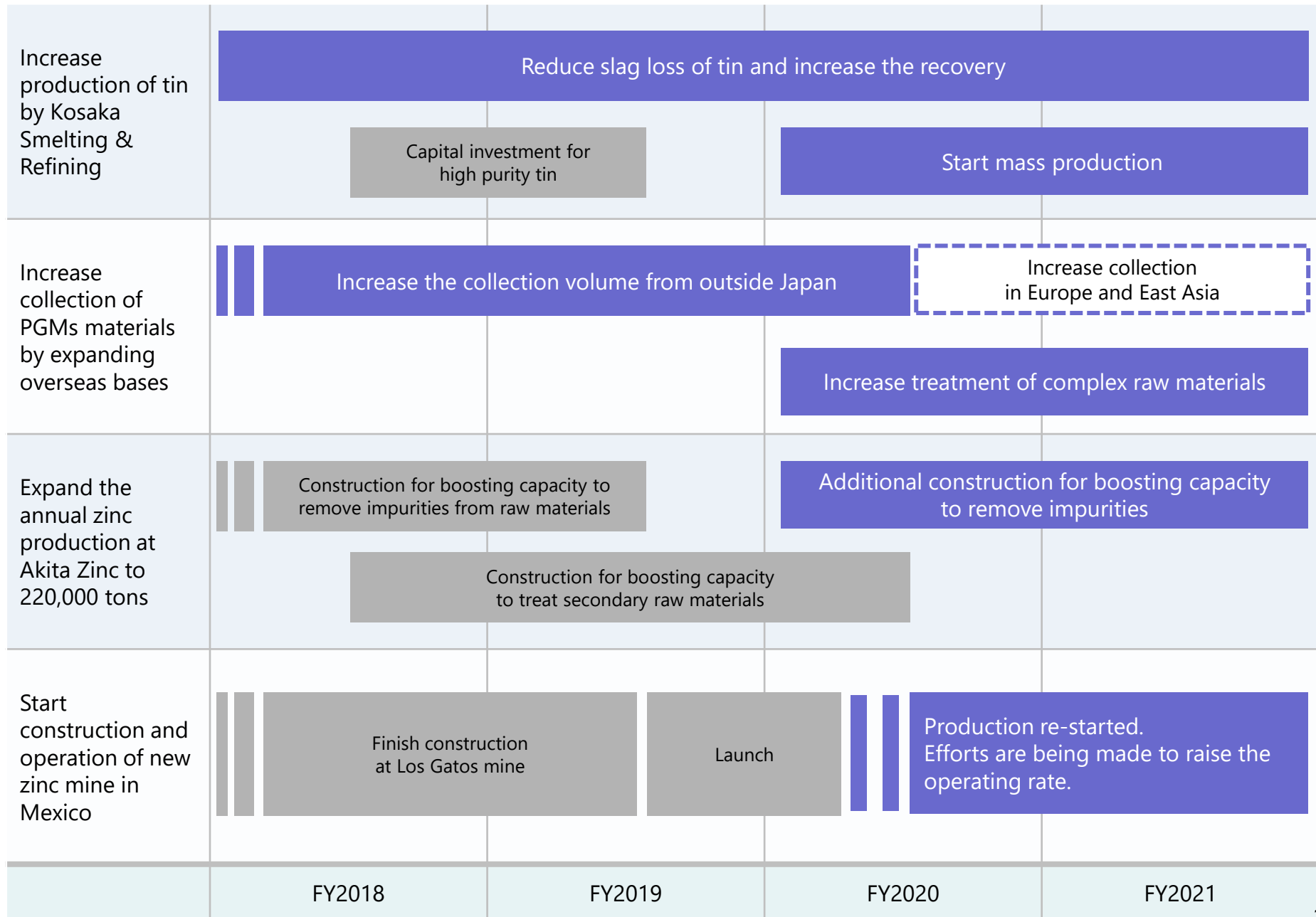
(FY2019/H1 = 100)

	FY2019		FY20	
	H1	H2	H1	H2
Copper Production (Kosaka・Onahama)	100	103	98	105
Gold Production (Kosaka)	100	112	90	108
Zinc Production (Akita)	100	108	91	111

Overview of FY2020/H2 (comparison with H1)

- With respect to zinc smelting, efforts will be made to boost the treatment of secondary raw materials.
- The volume of collected spent catalysts is projected to be at the same level as in H1.
- The Los Gatos mine re-started operation in June. It is expected to generate net profit in H2 of FY2020 partly due to a rise in metal prices.

The Progress of Major Actions on Midterm plan



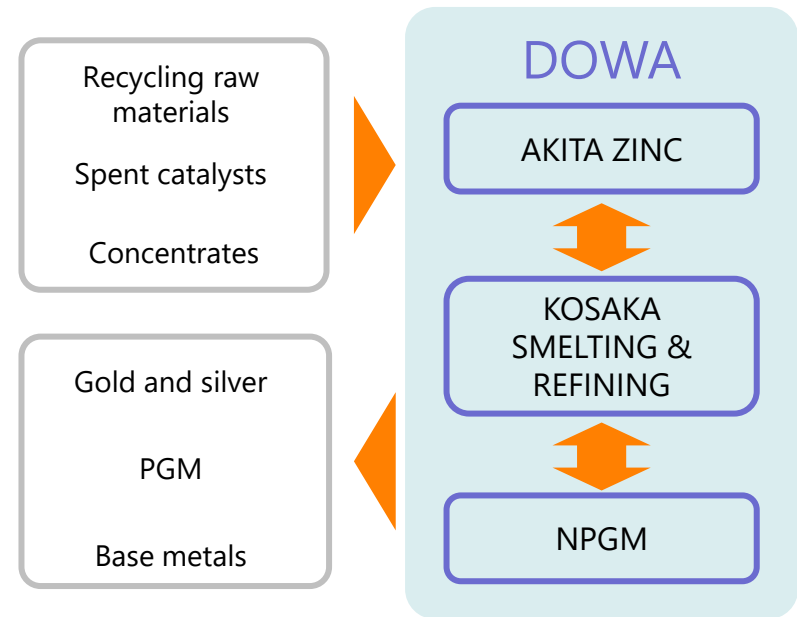
Advantages of the recycling and smelting complex

- Collaboration of multiple smelting processes
→ Recovery of approximately 20 types of metals.
High-level capacity of recovering precious metals.
- Stable collection of materials on a global basis

The complex achieved stable profit, aided by a rise in metal prices and the improvement of raw material procurement conditions.

Initiatives in the zinc business

- Los Gatos mine:
Improvement of mining and processing processes including the cost thereof.
→ Efforts will be made to ensure that concentrates are stably supplied to Akita Zinc and invested capital is collected as expected.
- Akita Zinc:
Additional construction started to boost the impurity removal capability. Completion is scheduled for H2 of FY2021.
→ Responsiveness will be raised to accept varieties of materials.
- Processing site in Thailand: Investment for expansion has been suspended temporarily.
→ Action will be taken again as soon as there are signs of demand recovery.



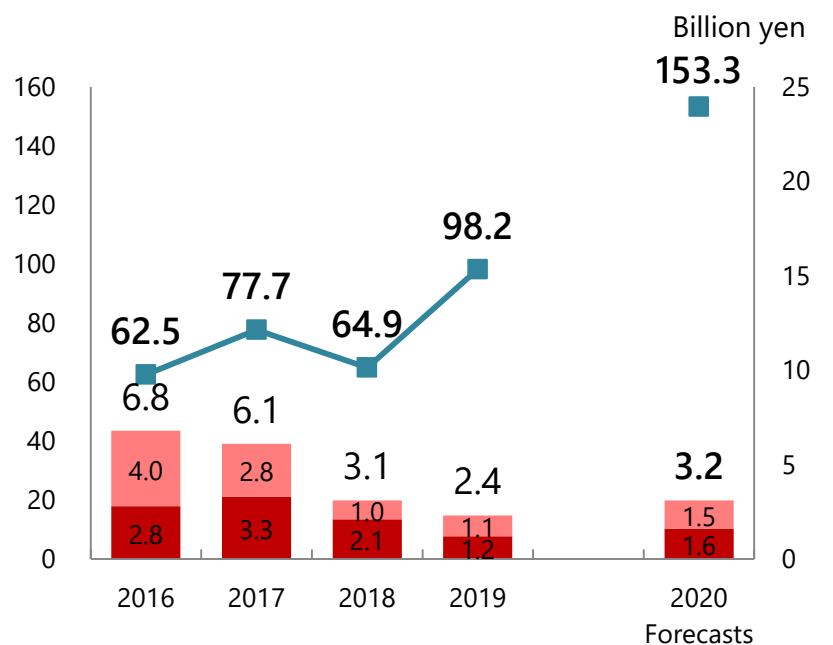
The recycling and smelting complex

Business Overview

Business Environment (FY2020/H2)

- Solar panel installations will increase globally.
- Total smartphone shipments will decline.
- The number of wearable devices is increasing, reflecting rising health consciousness.

Net Sales & Ordinary Income



ordinary income in H2 ordinary income in H1 Net sales

《Major Product Trends》

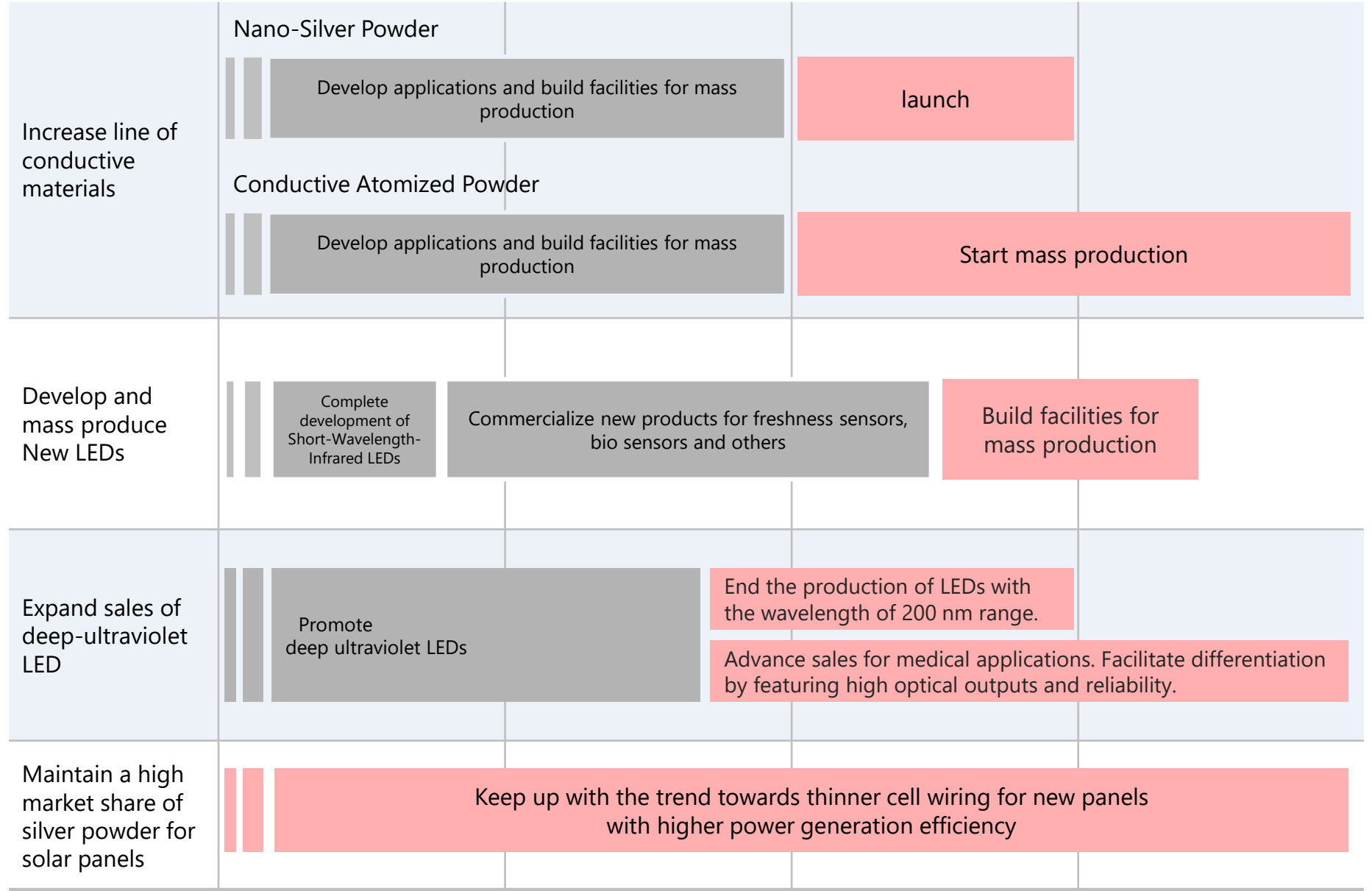
(FY2019/H1 = 100)

	FY2019		FY2020	
	H1	H2	H1	H2
LED Sales Volume	100	97	114	98
Silver Powder Sales Volume	100	116	106	116
Income from new products (e.g. evaluation sample incomes)	100	134	156	167

Overview of FY2020/H2 (comparison with H1)

- For silver powder, efforts will be made to capture the growth in demand for new panels.
- Sales of LED will be at the year-ago level, reflecting the normalization of demand for medical equipment.
- Efforts are being made to expand sales of conductive atomized powder.
- Initial investment has been made for construction of mass production facilities for short-wavelength infrared LEDs.

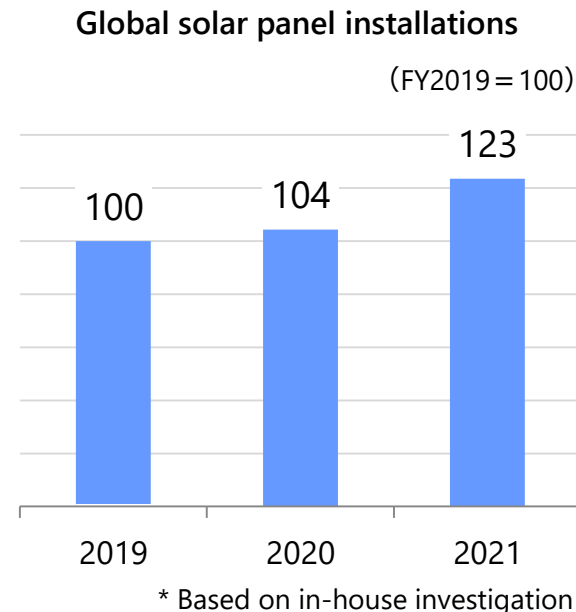
Progress of Key Measures in Midterm Plan



	FY2018	FY2019	FY2020	FY2021
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■ Silver powder

- Demand for solar panels will be strong because new energy policies are implemented in a range of countries.
- Installations are increasing in Brazil and India in addition to China and the United States.
- Installations in 2021 include those postponed due to the COVID-19 pandemic.
 - Efforts will be made to develop silver powder suitable to thinner cell wiring in response to the needs for higher power generation efficiency, thereby maintaining the top market share.



■ Conductive atomized powder

- Thanks to progress in the application to capacitors, production moved into the stage of mass production-based sales in the second quarter of 2020.
 - Efforts will be made to further promote sales, improve production efficiency and facilitate application to inductors and other components.

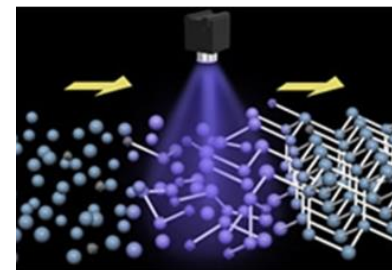
■ Deep-ultraviolet LEDs

- The production of LEDs with a wavelength in the 200 nm range for sterilization ended due to changes in the business environment.
 - Efforts will be made to expand sales of LEDs with a wavelength in the 300 nm range mainly for medical applications by featuring the industry's top-class outputs and reliability.

Example of application of LED products with a wavelength in the 300 nm range



Skin treatment



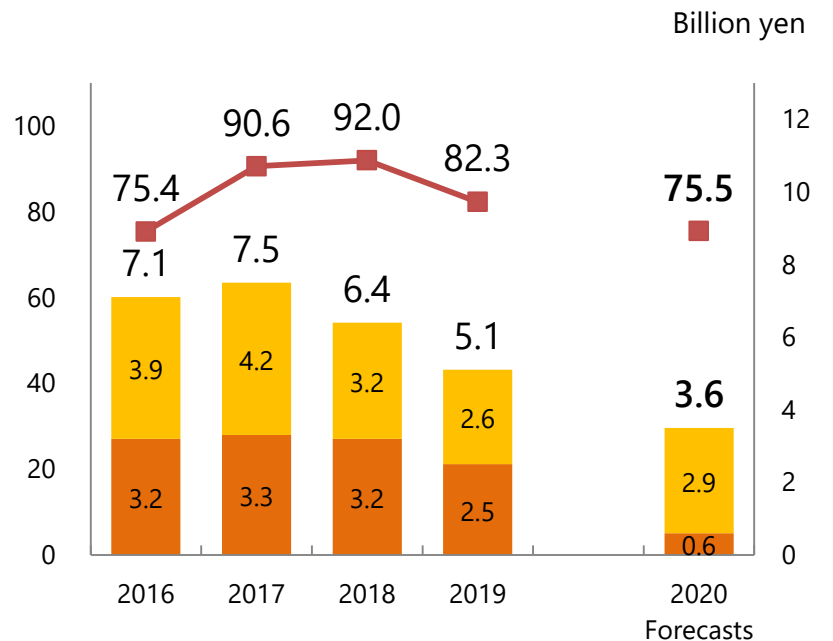
Resin curing

Business Overview

Business Environment (FY2020/H2)

- Automobile production that remained sluggish due to the COVID-19 pandemic will recover sharply.
- Progress will be made in electrification and the incorporation of intelligence with respect to automobiles.
- Progress will be made in the incorporation of multi-functionality and high-speed capabilities in information and communication equipment.

Net Sales & Ordinary Income



■ ordinary income in H2 ■ ordinary income in H1 ■ Net sales

《Major Product Trends》

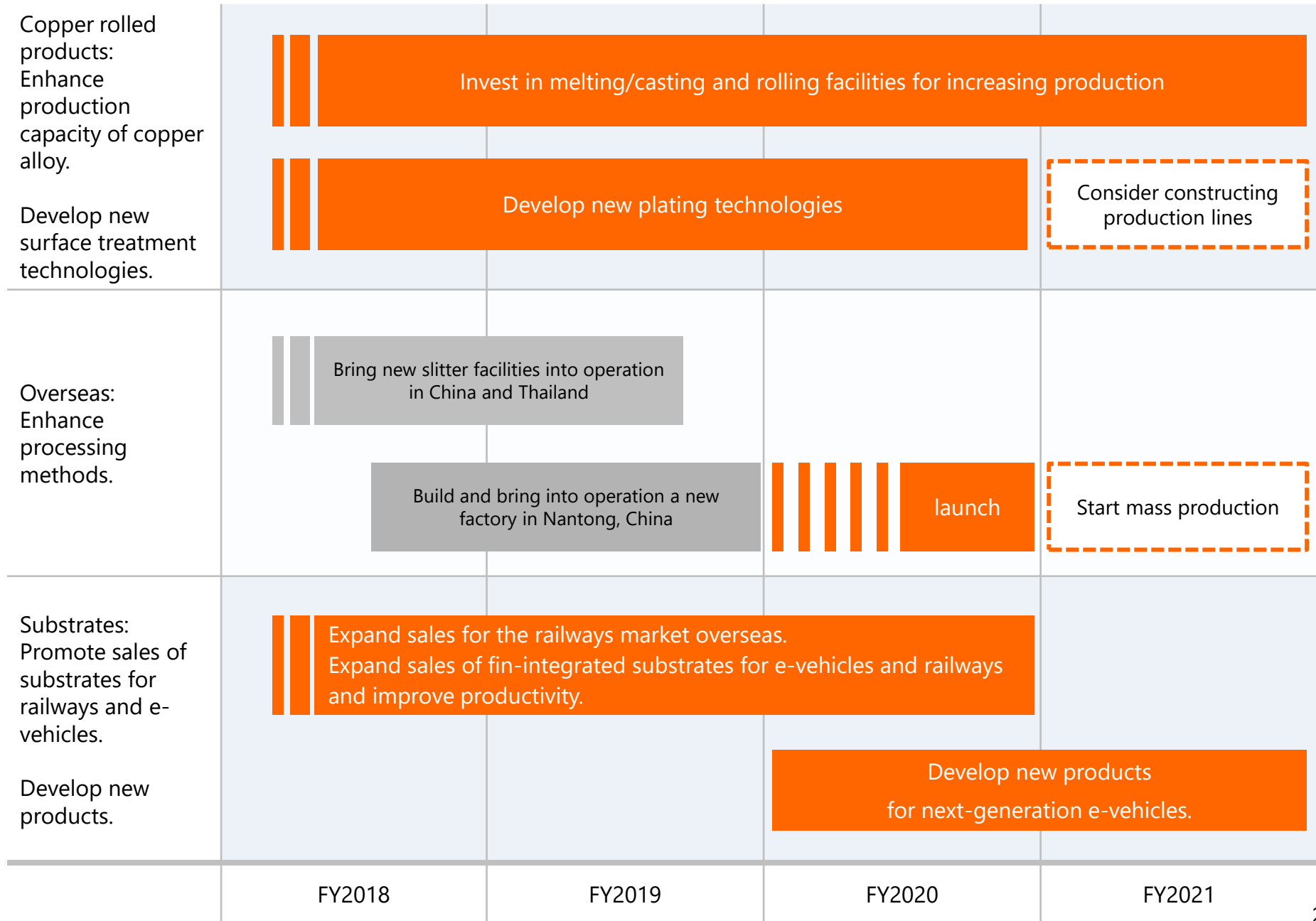
(FY2019/H1 = 100)

	FY2019		FY2020	
	H1	H2	H1	H2
Copper Alloy Sales Volume (For Automobile)	100	96	71	101
Copper Alloy Sales Volume (For information and communication equipment)	100	115	114	122

Overview of FY2020/H2 (comparison with H1)

- Sales of copper rolled products and precious metal plating for automobiles will rise in line with the recovery of automobile demand.
- Production of copper rolled products for information and communication equipment will increase, reflecting the recovery of demand for smartphones attributable mainly to the popularization of 5G devices.
- Metal-ceramic substrates for railways will enter the correction stage mainly due to the postponement of new line construction plans.

Progress of Key Measures in Midterm Plan

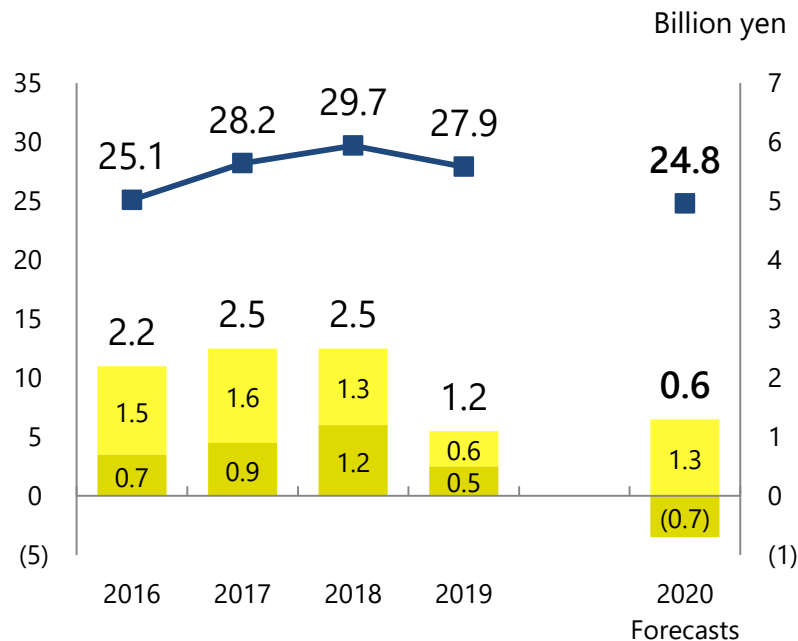


Business Overview

Business Environment (FY2020/H2)

- Demand will recover rapidly in main automobile production areas, such as Japan, China, the United States and India, and the operating rate of the customers' plants will improve.
- Maintenance work is likely to be postponed.

Net Sales & Ordinary Income



《Major Product Trends》

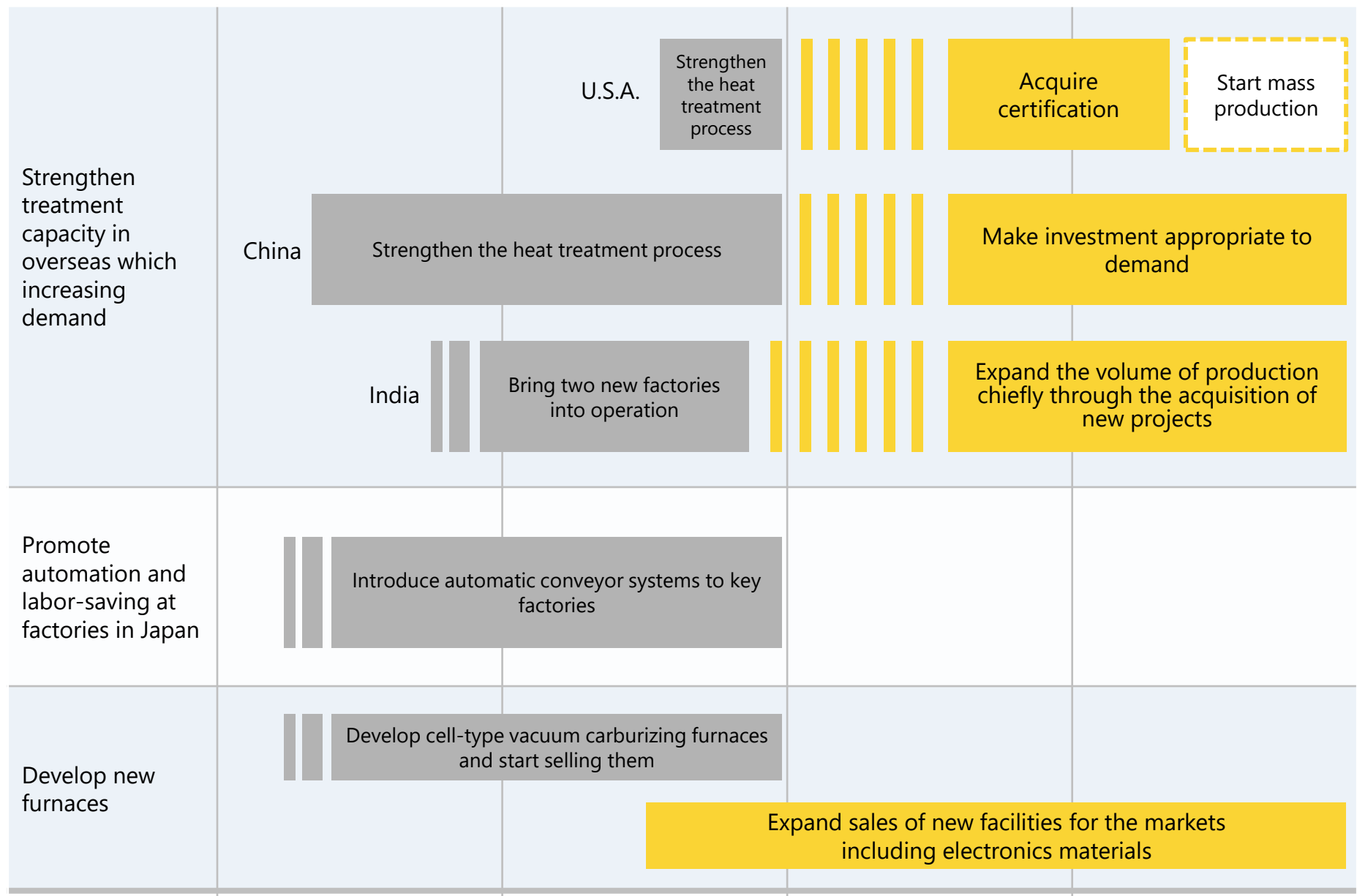
(FY2019/H1 = 100)

	FY2019		FY2020	
	H1	H2	H1	H2
Heat Treatment Sales Amount	100	100	70	106
Industrial Furnaces Sales Amount	100	98	68	106

Overview of FY2020/H2 (comparison with H1)

- The operating rate of domestic and overseas heat treatment sites is expected to improve in stages.
- Efforts will be made to generate profits in H2 against the backdrop of the recovery of orders while maintaining cost reduction results achieved in H1.

Progress of Key Measures in Midterm Plan



FY2018

FY2019

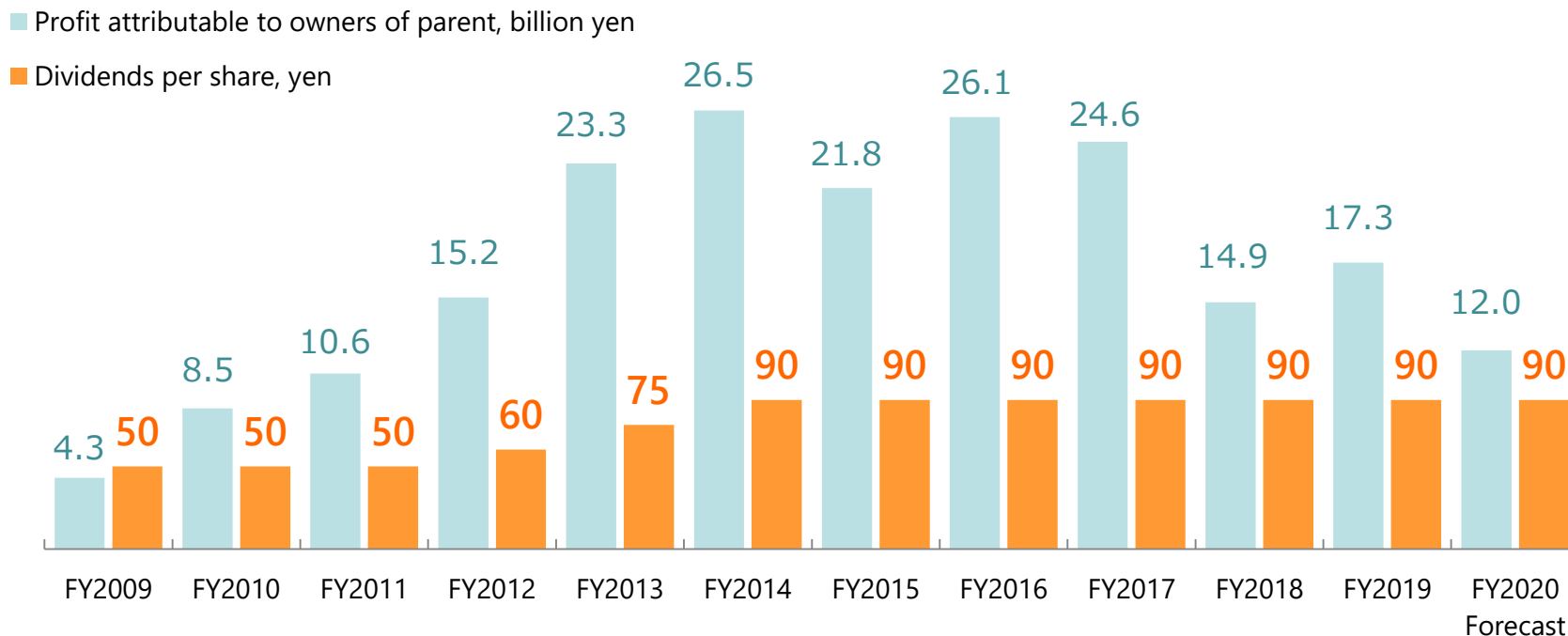
FY2020

FY2021

Dividend Forecasts

The Company aims to increase dividends according to profit levels while simultaneously maintaining the stable payment of an annual dividend of 90 yen per share for the period of the Midterm Plan 2020 (FY2018 – FY2021).

For FY2020, although profit attributable to owners of parent is expected to decrease year on year, the Company plans to pay a dividend of 90 yen per share based on this policy.



Note: The annual dividend per share between FY2009 and FY2016 has been adjusted to the amount after the consolidation of shares.

Revision of Mission, Vision, Values and Code of Conduct of the DOWA Group

The Group has revised its mission, vision, values and code of conduct from medium- to long-term perspectives. The vision of the DOWA Group (its goal in 2030) has been established as a guideline under which it will continuously contribute to providing solutions to a range of social issues by facilitating evolution in its core business.



Mission, Vision, Values and Code of Conduct of the DOWA Group

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.