



MITSUI KINZOKU

(Mitsui Mining & Smelting Co., Ltd. TSE5706)

FY2017 Results & FY2018 Forecast

May 14, 2018

■ Performance Trends

Unit: Billion yen

	2015	2016	2017	2018 forecasts	2016 medium-term management plan
Net sales	450.6	436.3	519.2	522.0	500.0
Operating income	11.1	38.5	49.5	44.0	30.0
Ordinary income	-11.3	31.0	11.2	41.0	35.0
Profit (loss) attributable to owners of parent	-20.9	18.7	-0.7	26.0	24.0
Free cash flow	24.0	-14.1	12.0	24.6	-
* (3-year total)				(22.5)	(8.0)
CAPEX	28.4	37.7	40.5	42.2	-
* (3-year total)				(120.4)	(110.0)
Shareholders' Equity Ratio	35.0%	33.5%	32.2%	36.2%	37%
D/E ratio (net)	1.03	1.10	1.11	0.88	0.9

*3-year total (2016–2018)

■ 2017 Results and 2018 Full-year Forecasts

● 2017 Sales and Ordinary Income – Year-on-year Comparison

(Unit: Billion yen)

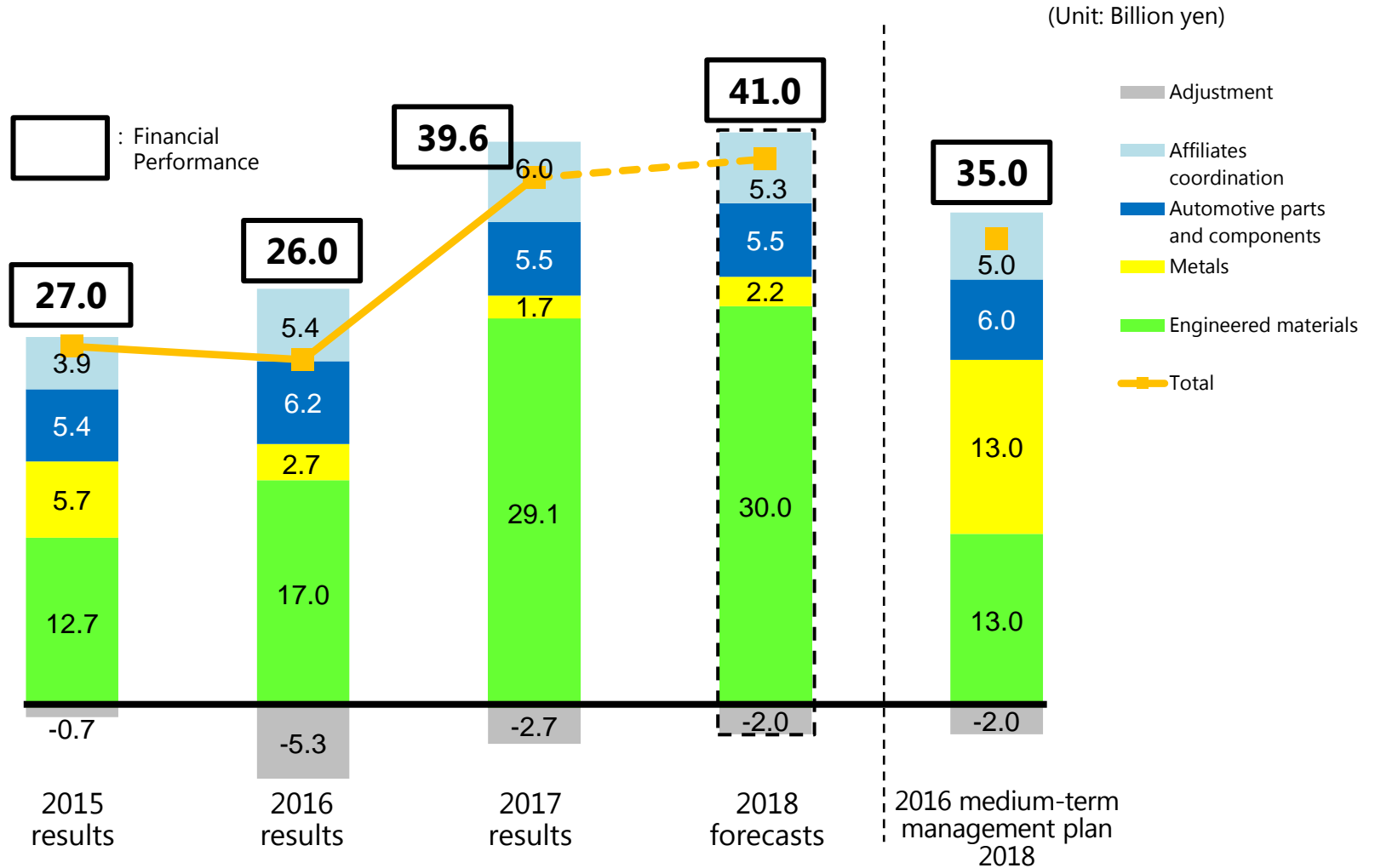
	2017 results		2016 results		Difference	
	Sales	Ordinary income	Sales	Ordinary income	Sales	Ordinary income
Engineered materials	167.2	30.6	145.8	15.9	21.4	14.7
Metals	186.5	5.5	139.6	8.5	46.9	-2.9
Automotive parts and components	102.0	5.5	113.2	6.2	-11.2	-0.7
Affiliates coordination	132.7	6.8	113.5	5.7	19.3	1.2
Adjustment	-69.3	-37.3	-75.8	-5.2	6.5	-32.0
Total	519.2	11.2	436.3	31.0	82.9	-19.8

● 2018 Sales and Ordinary Income (Forecasts) – Year-on-year Comparison

(Unit: Billion yen)

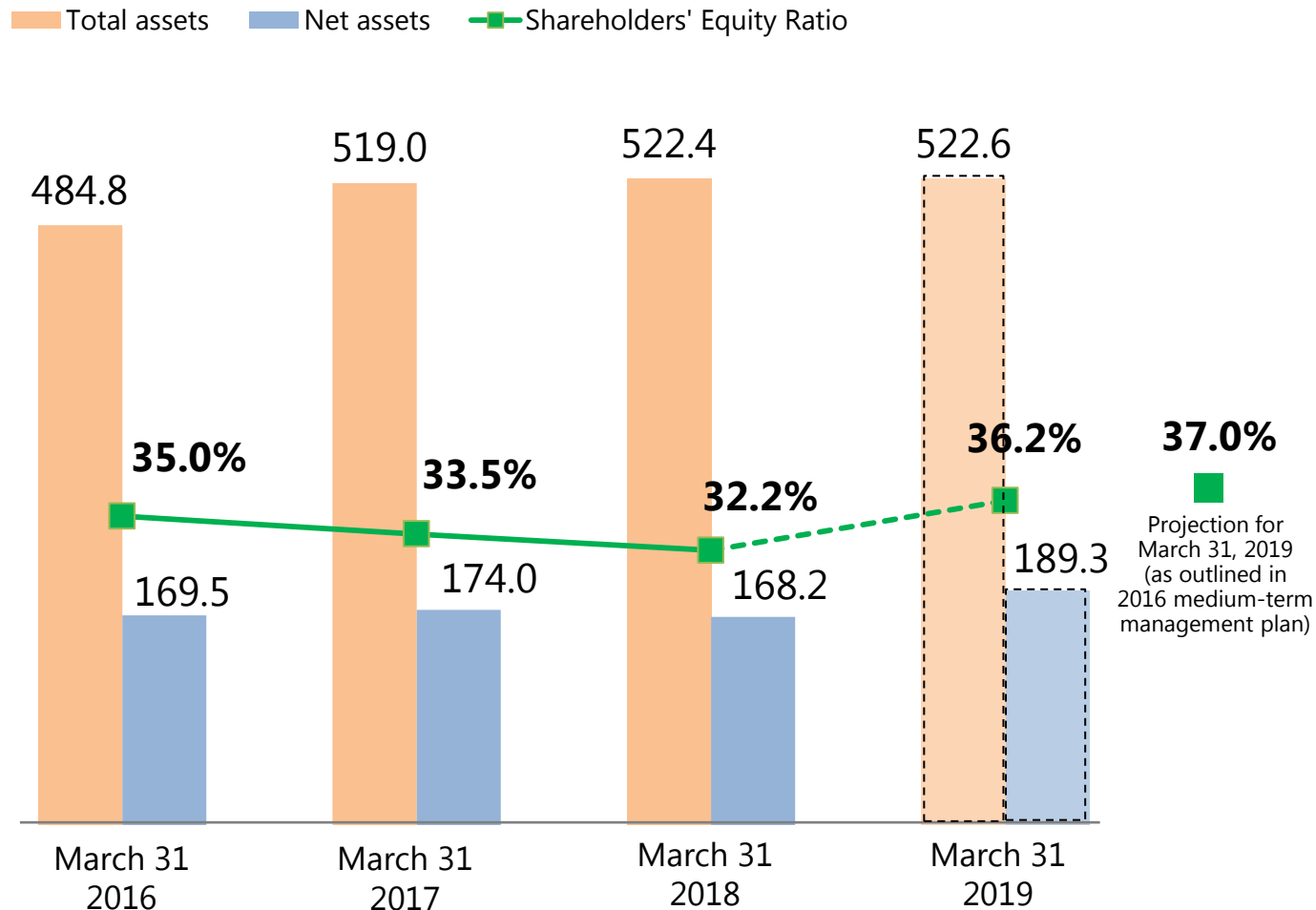
	2018 forecasts		2017 results		Difference	
	Sales	Ordinary income	Sales	Ordinary income	Sales	Ordinary income
Engineered materials	180.0	30.0	167.2	30.6	12.8	-0.6
Metals	181.0	2.2	186.5	5.5	-5.5	-3.3
Automotive parts and components	99.0	5.5	102.0	5.5	-3.0	0
Affiliates coordination	126.0	5.3	132.7	6.8	-6.7	-1.5
Adjustment	-64.0	-2.0	-69.3	-37.3	5.3	35.3
Total	522.0	41.0	519.2	11.2	2.8	29.8

Trends in Financial Performance (excludes inventory factor, Caserones impairment)



● Trends in Shareholders' Equity Ratio

(Unit: Billion yen)



● Dividend policy

- We will set a target dividend of 20% of consolidated earnings to shareholders. At the same time, with the aim of delivering sustained and stable dividends regardless of business performance, we will set a target dividend on equity (DOE) of 2.5%.
- The above policy applies as of FYE March 2019

● Dividend per share in FYE March 2019

	2Q	Final	Interim
March 2018	¥0	¥70	¥70
March 2019	¥0	¥90	¥90

* We will revise our shareholder returns policy according to strength of our business foundation and improvement of our financial situation.

■ Progress in Medium-term Management Plan

– Engineered Materials Segment

	Actions under the 2016 medium-term management plan	Results	Ongoing actions	Remarks
Copper foil	Boost sales of MicroThin™	Increased production capacity to 3,900km ² / month	Explore further production capacity increases	See pp. 8, 9
Catalysts	Expand sales of catalysts for automobiles	Expanded production capacity as planned	Win new customer orders	See p. 10
	Maintain market share in catalysts for motorcycles	Expanded market share beyond targeted figure	Continue expanding market share	
Engineered powders	Boost sales of tantalum oxide for SAW filters	After increased production capacity, facing stock adjustment	Monitor market recovery	
PVD materials	Improve sales of ITO sputtering targets	Expanded market share beyond targeted figure	Secure market share in China	
Research and development	Develop products and services that will lead to growth	(1) Steady progress in developing solid electrolyte for all-solid state battery	(1) Start taking steps toward mass production → Aim to achieve applicability soon after 2022	
		(2) Press release, Jan 25, 2018 HRDP, material for the formation of ultra-fine circuits	(2) Establish mass production techniques. Negotiate with clients over application	See p. 11

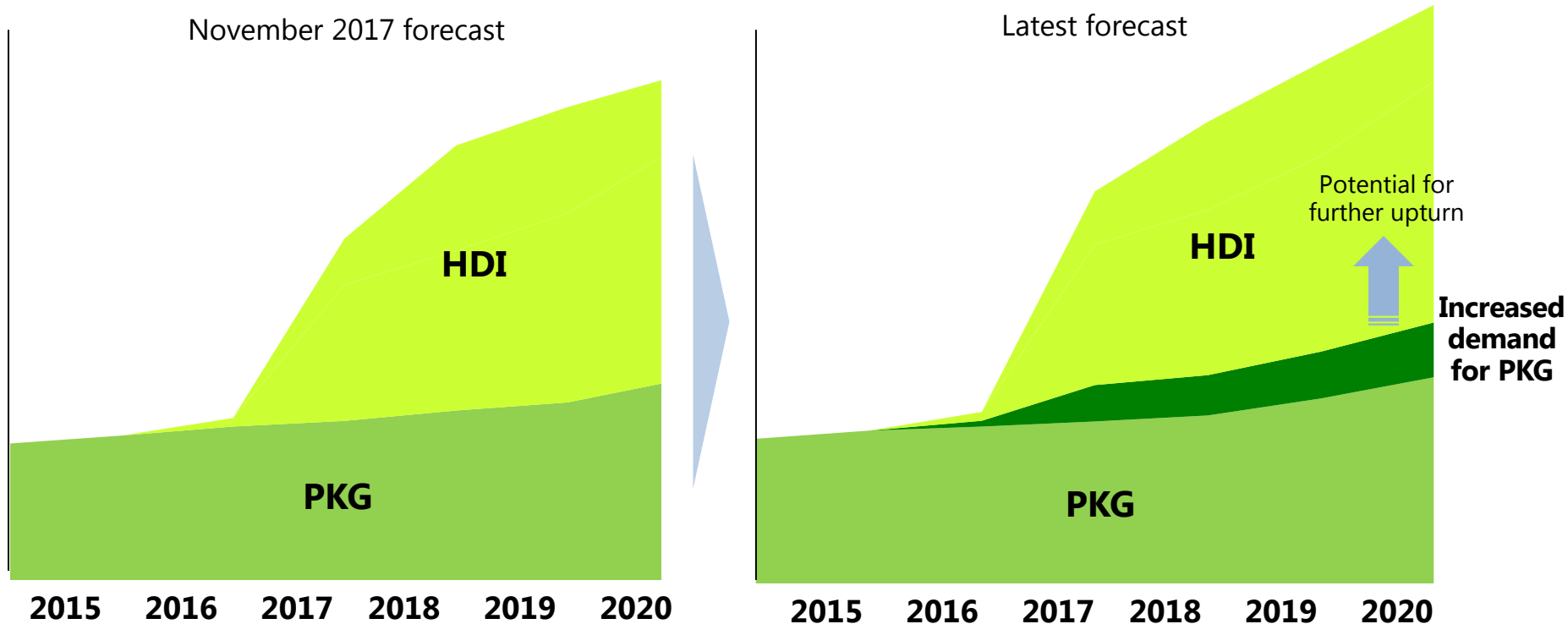
Ongoing actions related to production capacity and growth strategy that were not outlined in 2016 medium-term management plan

Operations	Actions during the term of 2016 medium-term management plan	Press releases
Copper foil	<ul style="list-style-type: none"> • Undertook second and third increase in production capacity of MicroThin *HDI • Increased production capacity of electro-deposited copper foil for flexible printed circuits • Increased production capacity of electro-deposited copper foil for high-frequency circuit boards 	<ul style="list-style-type: none"> • May 15, 2017, Nov 14, 2017 • July 13, 2017 • July 20, 2017
Engineered powders	<ul style="list-style-type: none"> • Increased production capacity of cerium oxide based abrasive MIREK™ • Increased production capacity of copper powder for laminated ceramic capacitor 	<ul style="list-style-type: none"> • Sep 14, 2017 • Feb 1, 2018
Growth strategy	<ul style="list-style-type: none"> • Jointly established private fund with SBI Investment • First joint venture under the private fund 	<ul style="list-style-type: none"> • Sep 1, 2017 • Nov 7, 2017

*HDI = High Density Interconnect

November 2017 demand forecast has been upwardly revised in view of increased demand for non-smartphone package substrates (PKG)

Demand Forecast for MicroThin™ (November 2017 forecast vs. latest forecast)

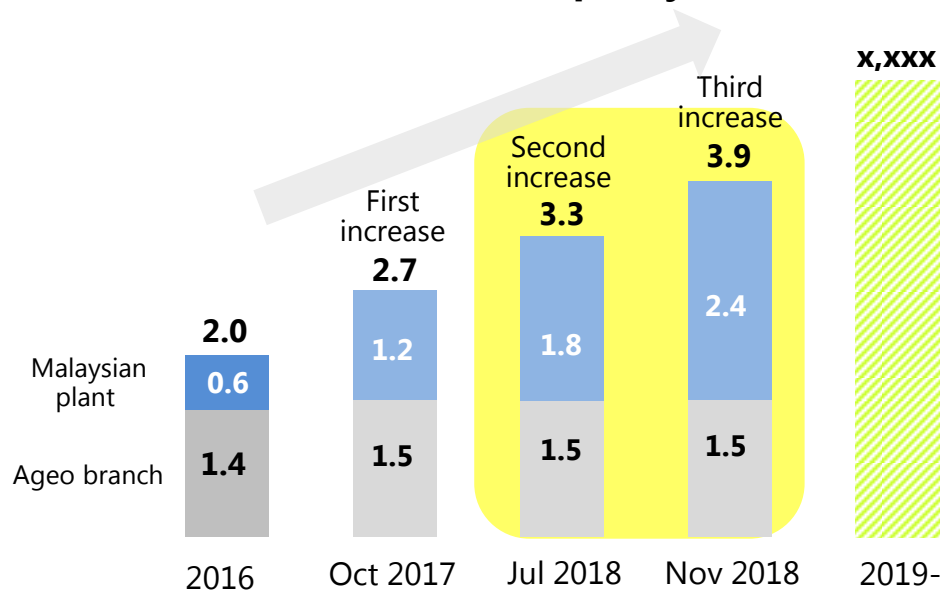


- From 2017, existing demand is significantly supplemented with non-smartphone PKG (external memory, *GPU, etc.) demand, boosting growth rate by 10%.

⇒ New demand for MicroThin™

*GPU = Graphics Processing Unit

MicroThin™ Production Capacity (million m²/month)

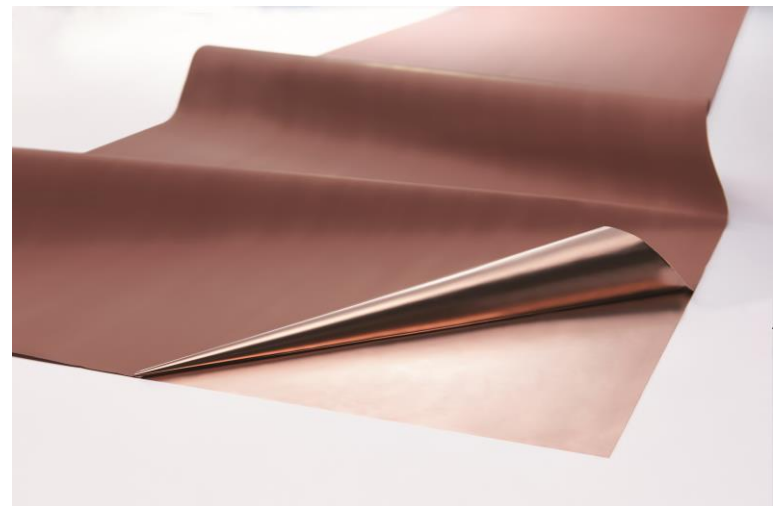


- Increase for this year was as planned.
- We are considering the timing of the next increase—it should coincide with rises in HDI and PKG demand

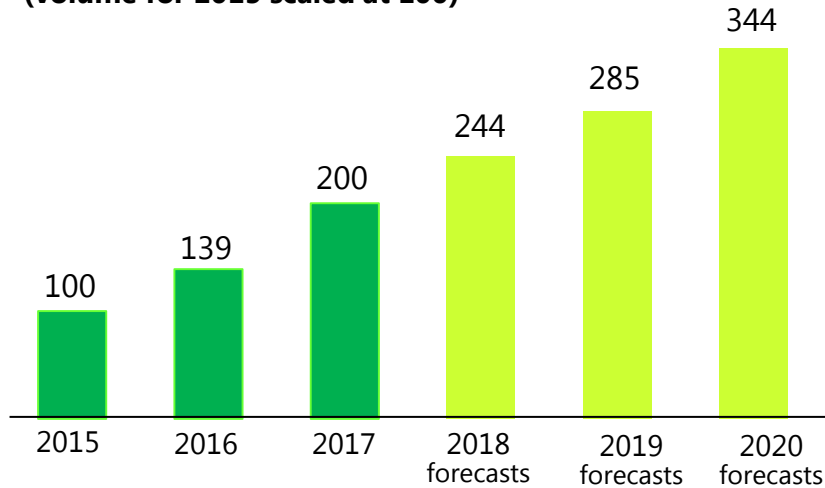
Actions to expand sales of MicroThin™

- HDI: Promote middle-end applications
- PKG: Capture non-smartphone demand (e.g., external memory, AI-related GPU)

Our ultra-thin copper foil MicroThin™



Sales forecasts: Catalysts for automobiles (volume for 2015 scaled at 100)



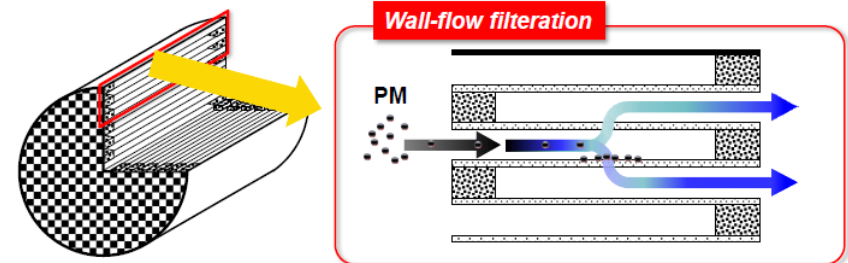
Progress in boosting production capacity of catalysts for automobiles

Base	● = Yes	
	Facility established?	Mass production started?
Kamioka (Japan)	●	●
MKCA (USA)	●	●
MKCI (India)	●	Preparations in progress
MKCZ (China)	●	●
MKCJ (Indonesia)	●	●

- Automobiles-related sales volume on the increase thanks to strong sales of compatible vehicles and expanding applications
- Production capacity increase proceeding as planned.
Anticipating strong sales, we will explore further increases in production capacity

Developing new (GPF) catalysts

- Particulate number (PN) emissions for gasoline vehicles
Start full-scale production of GPF catalysts that comply with stricter PN emission limit*
(GPF = Gasoline particulate filter)

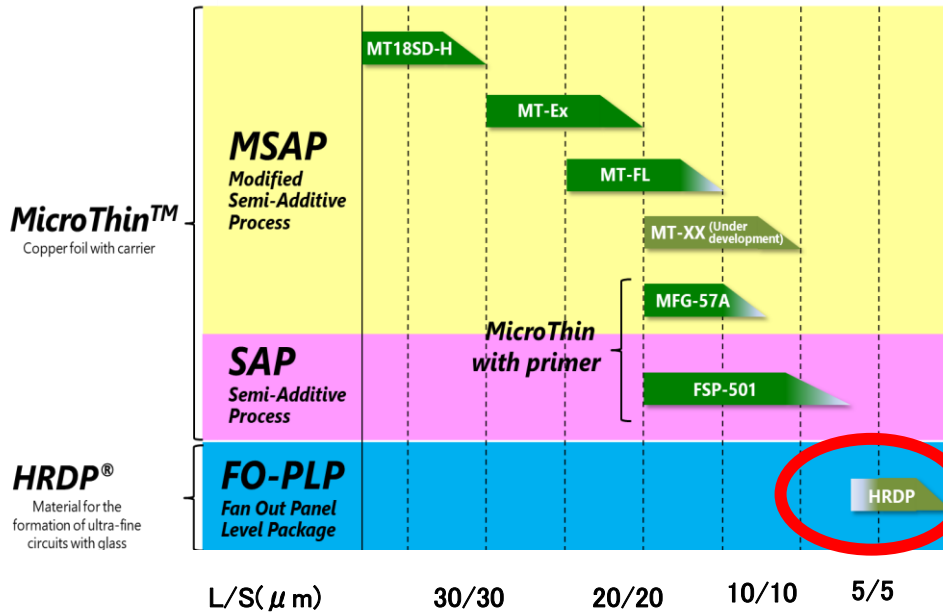


*The levels of PM (particulate matter) are controlled

■ Research and Development: HRDP®

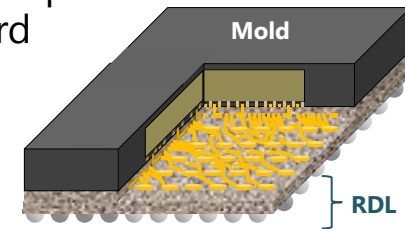
– Material for the formation of ultra-fine circuits

Roadmap for ultra-fine circuit miniaturization



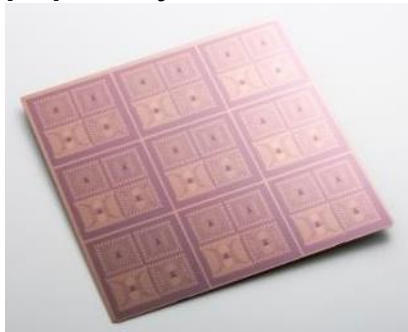
With HRDP® you can...

- Optimize line/space (L/S) ratio
 $L/S = < 5/5\mu\text{m}$
(a range not possible with MicroThin™)
- Optimize area and height profile of packaged circuit board

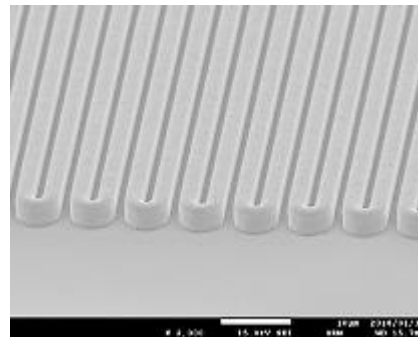


Semiconductor package

Demo board after formation of fine-wiring layer (prepared by our client)



Achieved circuit with L/S ratio of 2/2μm



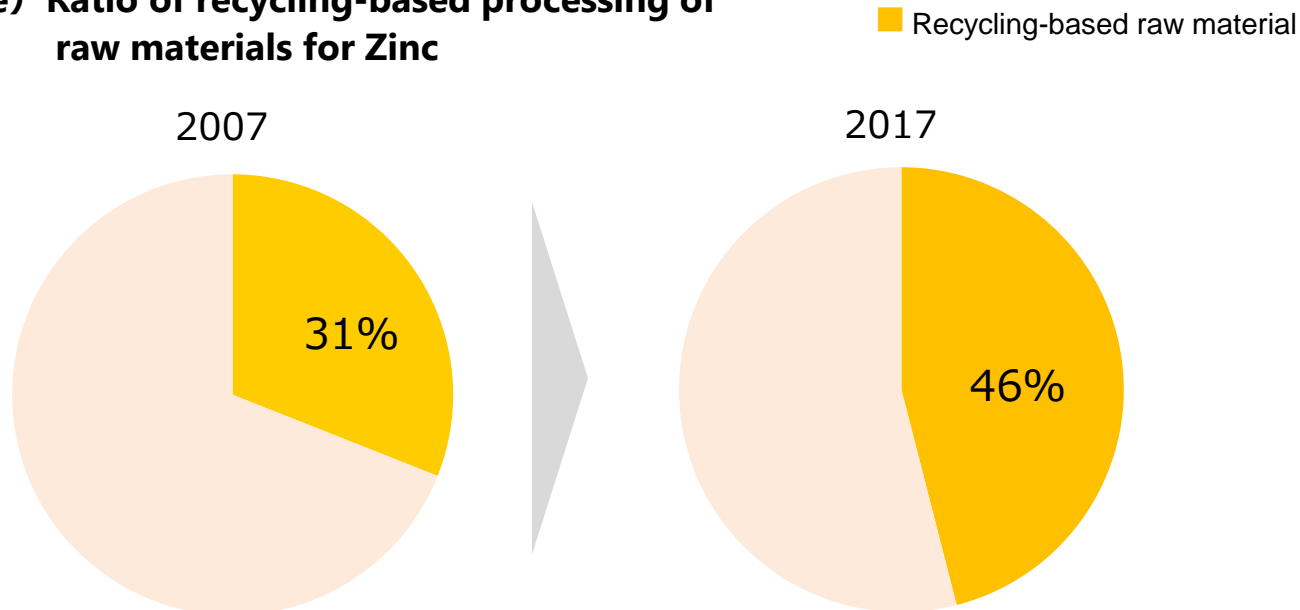
Development progress

- Working with GEOMATEC Co., Ltd., we established mass production technique
- HRDP® has won acclaim among a number of clients. This positive reputation will help us promote the use of the material.

■ Progress in Medium-term Management Plan – Metals Segment

	Actions under the 2016 medium-term management plan	Results	Ongoing actions	Remarks
Metals & Recycling Div.	Step up recycling-based smelting	Steadily increased volume of recycling-based processing of raw materials	Accelerate efforts to streamline smelting process	See p.13
Caserones Copper Mine	Improve operations in Caserones copper mine	Some progress made	Stabilize operations, reduce costs	See p.14

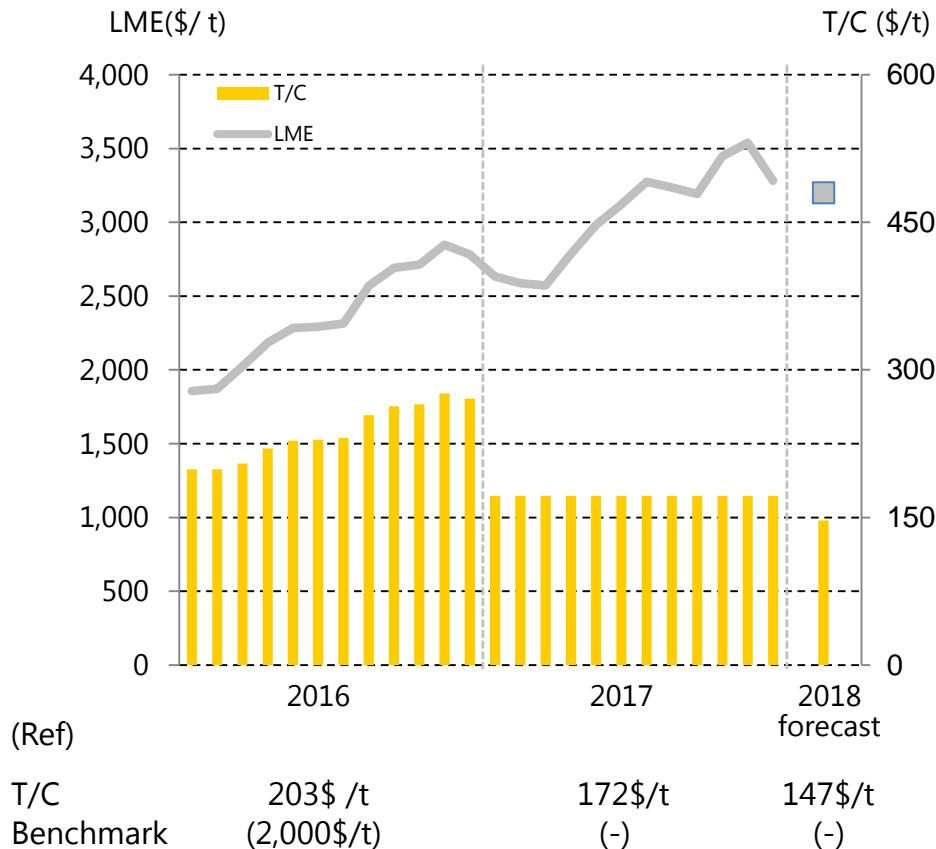
(Reference) Ratio of recycling-based processing of raw materials for Zinc



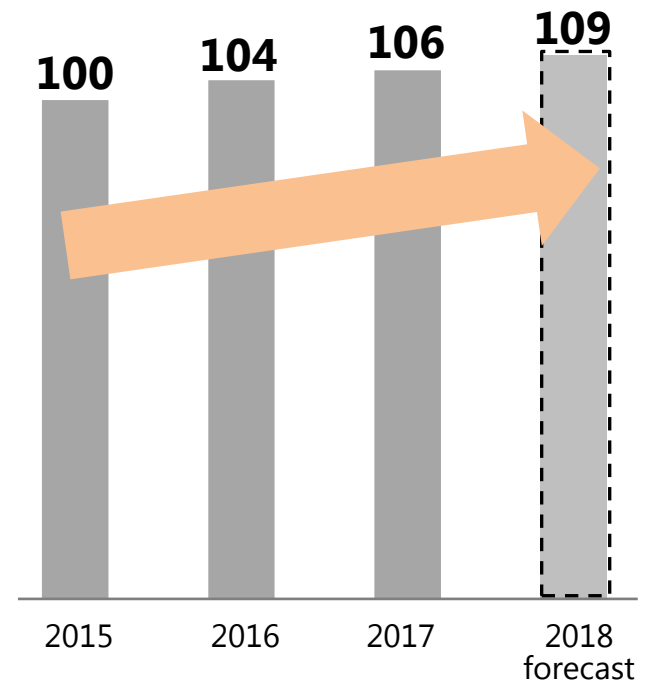
Despite a rise in the price of zinc, there was a decline in smelting margin as indicated by T/C.

The volume of recycling-based processing of raw materials is on a gradually increasing trend.

Trends in Zinc Price and T/C

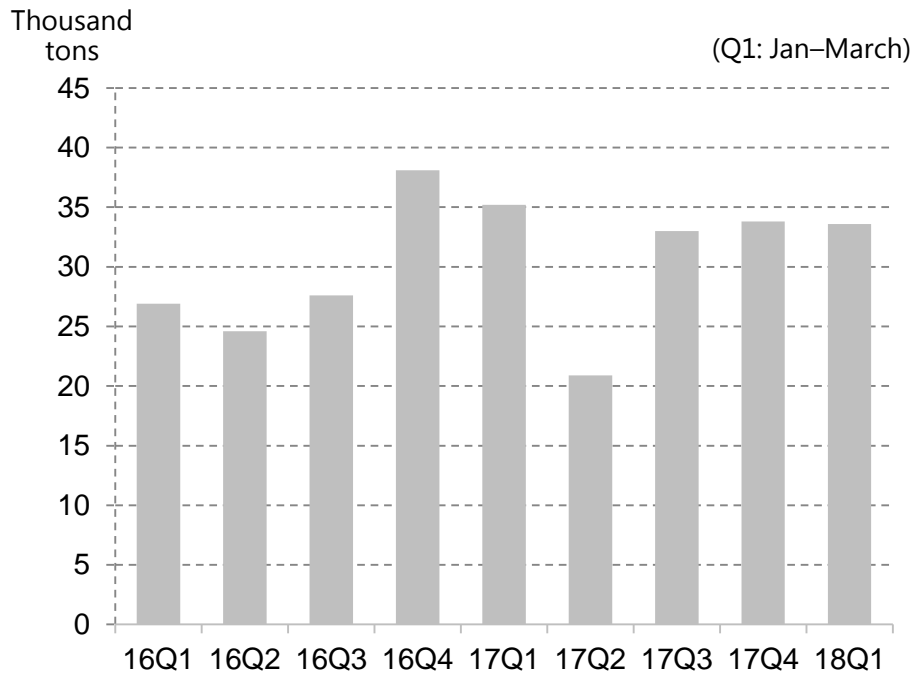


Growth in recycling-based processing of raw materials (volume for 2015 scaled at 100)

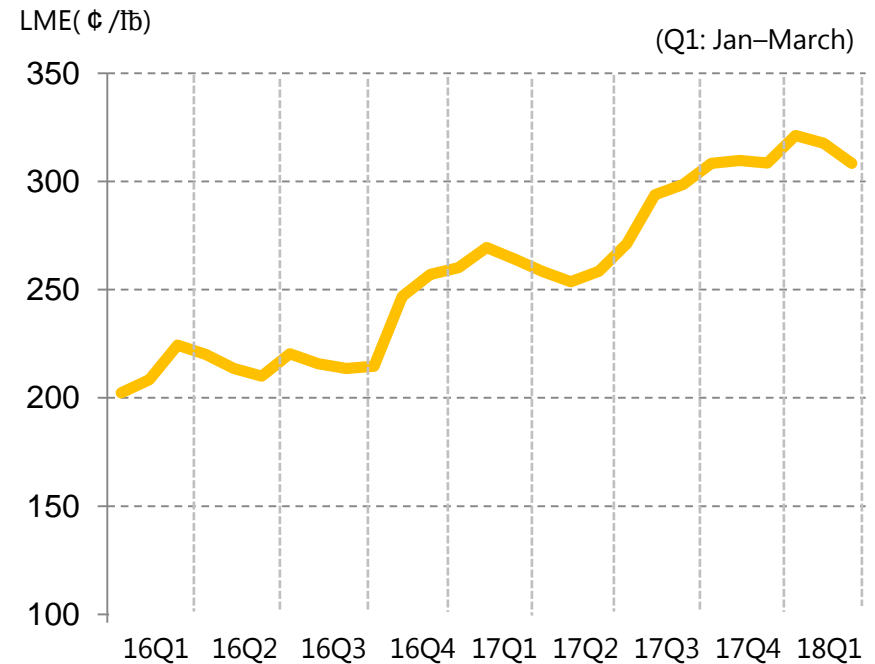


The production rate dropped in the 2nd quarter of 2017, because operations were suspended in May last year due to wind gusts and heavy snowfall. However, the production rate subsequently recovered. We aim to increase production by further improving operations at the mine.

● Production trends (copper base)



● Trends in Copper Price (Jan 2016 to Mar 2018)



■ Progress in Medium-term Management Plan – Automotive Parts and Components Segment

Actions under the 2016 medium-term management plan	Results	Ongoing actions	Remarks
Expand sales globally	Efforts underway to expand sales of strategic products in China, Europe, and America	Overseas bases to expand sales by attracting non-Japanese clients	See p.16
Insource and automate	Improved cost competitiveness	Gain competitive edge with high-quality products, short lead times, and high-efficiency	
Establish self-contained regional supply systems	Bases increased their domestic competitiveness (progress made in establishing mother factory system)	Automate to boost productivity, develop mass production management techniques to stabilize quality	

Progress is generally as planned. To expand sales further from 2019 onward, we will continue efforts on the manufacturing side to improve cost effectiveness and ensure high quality

Side door latches (example)



MITSUI KINZOKU ACT's domestic base (Kyushu plant)



MKA's sales expansion actions aimed at expanding orders from 2019 onward (Actions/results for Chinese, European, and American markets)

- America: Efforts underway to win orders
- China: Focus on expanding sales among Chinese businesses
- Europe: Establish Europe business unit

MKA's sales efforts during the term of the 2016 medium-term management plan have ensured a growing sales trend from 2019 onward. MKA will aim to accumulate even more reliable orders.

Ongoing actions

- Pursue product miniaturization and weight reduction
- AUTOMOTIVE WORLD expo (Jan 2018)
MKA exhibited its door-assist system, which uses the company's Hinge Center Drive technology
 - Auto Side Door, Auto Back Door

MITSUI KINZOKU ACT's production and sales bases

● Production and sales base



- MKA now has 10 bases in 8 countries (including Japan)
- MKA has around 15% share of global side door latch market



Hinge Center Drive Unit



Exhibit Auto Side Door

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Statements contained in these materials regarding forecasts of future events are qualified by various risks, both existing and unknown, and uncertainties, which may have a material impact on the actual business conditions and operational activities. Consequently, please be aware that actual performance may differ substantially from forecasts and business plans indicated herein because of various unforeseeable factors.

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