

# Hitachi Metals, Ltd. Fiscal Year 2021 Medium-term Management Plan

## [Table of Contents]

- 1. Summary of FY2018 Medium-term Management Plan**
2. Overview of FY2021 Medium-term Management Plan
3. Key measures
4. Conclusion

April 25, 2019

## Our vision

Expand the business globally while improving profitability



Continuous portfolio remodeling

Organic growth  
(from capital investment & R&D)

Growth through M&A

Strengthen the business base

Management driven by both the growth strategy and a stronger business base

## Implementation of the growth strategy and building a stronger business base

### Organic growth (from capital investment & R&D)

- Established Corporate Research Lab, “GRIT\*1” (Investment: approx. ¥10 billion)  
(Opened in April 2017; new building opened in April 2018)
- Enhanced open innovation  
Established the NIMS-Hitachi Metals Next-Generation Materials Development Center (July 2016)  
Selected as business eligible for grant from the grant program for creation of regional universities and industries (FY2018)  
Developed OBC\*2 jointly with Fraunhofer IISB in Germany (April 2019)
- Integrated SH Copper Products and Hitachi Metals Neomaterial (April 2018)
- Expanded production capacity for clad metals at Tsuchiura Works  
(Investment: approx. ¥7.5 billion) (Started operation in 2H, FY2018)
- Boosted production capacity for rolls for steel mills and structural cast steel products (Investment: approx. ¥3 billion) (Started operation in 2H FY2018)
- Introduced innovative production lines for magnetic materials  
(Total investment amount: approx. ¥18 billion) (Started operation in 1H FY2018)
- Established Hitachi Metals San Huan Magnetic Materials (Nantong) Co., Ltd.  
(September 2016)
- Boosted production capacity for piping components, improved production efficiency  
(Investment: approx. ¥3 billion) (April 2017)
- Updated the continuous casting & rolling line in the Wires, Cables, and Related Products (Investment amount: approx. ¥5 billion) (Started operation in FY2018)

\*1 GRIT: Global Research & Innovative Technology Center \*2 OBC: On Board Charger for xEV

## Implementation of the growth strategy and building a stronger business base

### Continuous portfolio remodeling

- Concentrated and enhanced rolls production in Japan and discontinued production at production sites in China (September 2016)
- Transferred the shares of a U.S. subsidiary (December 2016)
- Transferred the information system business (December 2016)
- Sold the lead frame business (January 2017)
- Decided to withdraw from the aluminum wheels business  
Transferred the shares of U.S. subsidiary (March 2019)  
Discontinue production in Japan (Scheduled for September 2020)

### Growth through M&A

- Made Hitachi Metals MMC Superalloy, Ltd. a wholly-owned subsidiary and consolidated the company, and established the Okegawa Works  
(October 2017 and April 2018)
- Acquired Santoku Corporation (April 2018)

### Strengthen the business base

- Extended the scope of application of the sliding-scale raw material price system
- Reduced the number of subsidiaries:  
89 (the end of FY2015) → 63 (the end of FY2018)

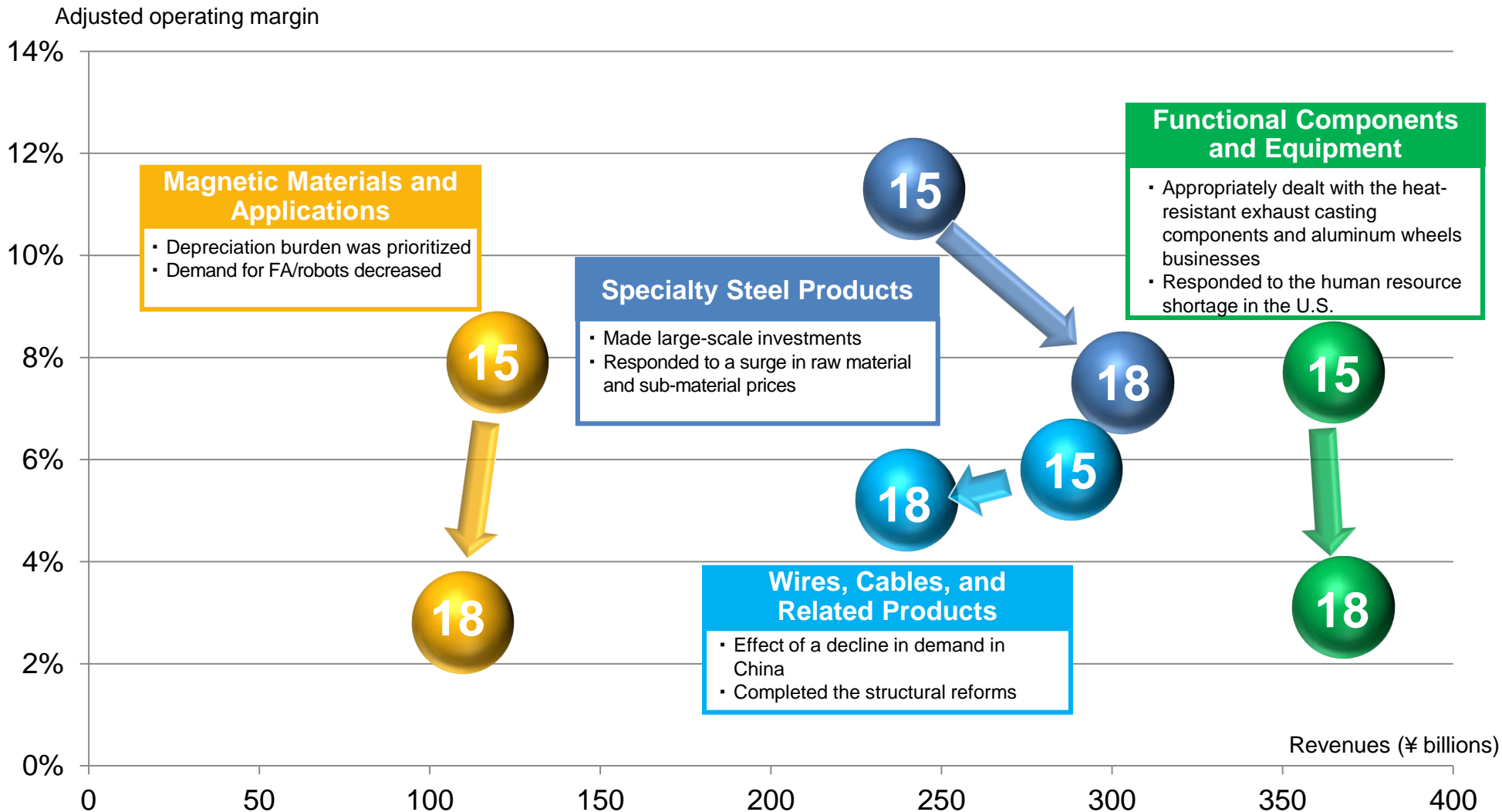
Although the company worked on making up for long-term under-investment and strengthening corporate-wide functions, there was a delay in reaping the benefits of the investments.

1. Dispersion of resources
2. Lower cash flows: increased inventories and capital expenditure
3. Surfacing “businesses with issues” and delay in taking actions
4. Insufficient improvement in *Monozukuri* and sales capabilities
5. Corporate culture with a tendency towards specific optimization still lingers



The Company has lagged significantly behind the profit target

# Income decreased across all internal companies (vs. the final year of the previous Medium-term Management Plan)



# Hitachi Metals, Ltd. Fiscal Year 2021 Medium-term Management Plan

## [Table of Contents]

1. Summary of FY2018 Medium-term Management Plan
- 2. Overview of FY2021 Medium-term Management Plan**
3. Key measures
4. Conclusion





Hitachi Metals, Ltd.

## Building the Future

Being the Best Enterprise

## Building Innovation

“Only 1, No. 1” *monozukuri* and new products

## Building People: One step ahead tomorrow of where you are today

Experience a true sense of personal growth through the work style reform project  
*Monozukuri* that considers of safety, environment, and quality

韋則彊

— Wa sureba tsuyoshi —

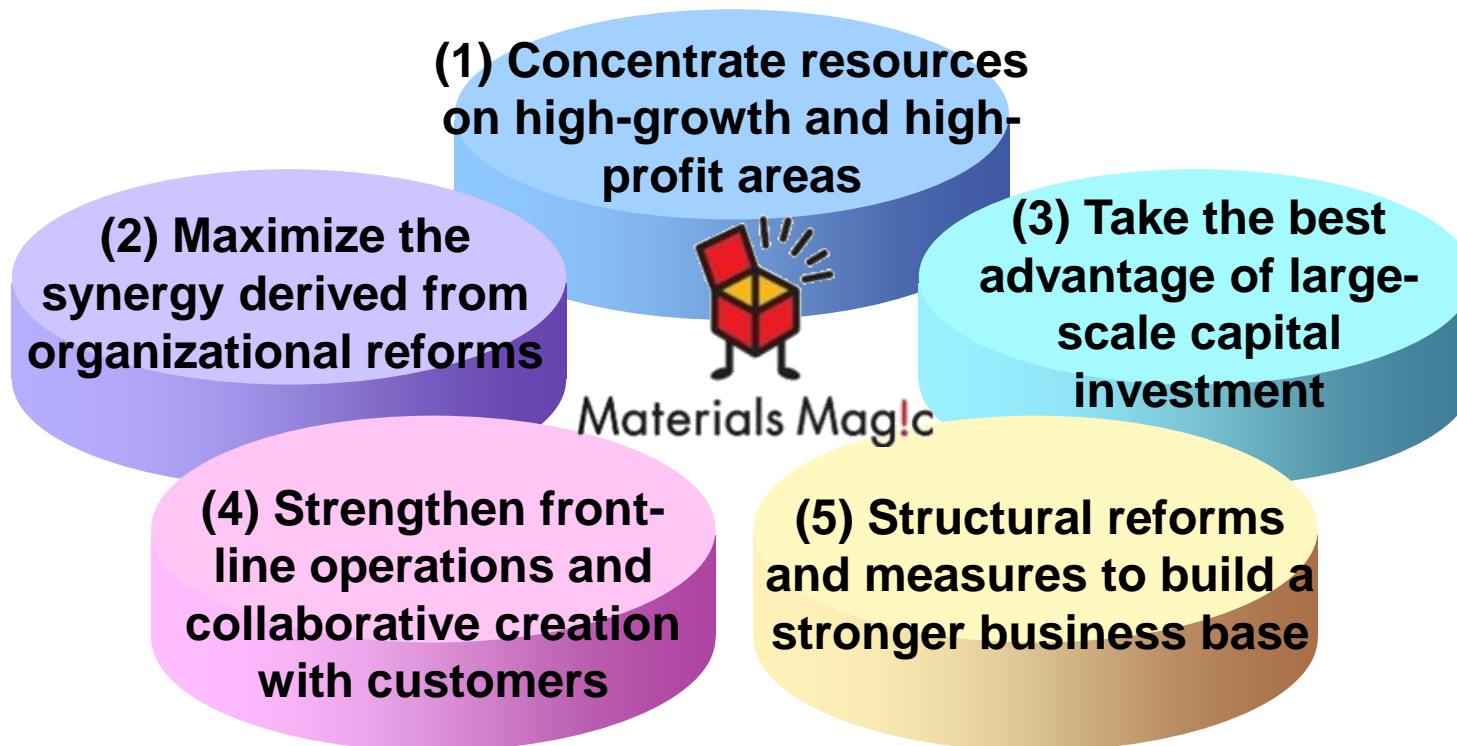
# ONE FORCE FOR CHANGE



# A High-performance Materials Company Supporting Sustainable Societies

– Building People, Building Innovation, and Building the Future –

## Expand “Only 1, No. 1” businesses and products



## 2-3. FY2021 Medium-term Management Plan: Main Managerial Indicators

¥ billions	FY2018 Actual		FY2021 Plan (targets)		vs. FY2018
Profit margin in brackets	US\$1 = ¥111 1 euro = ¥128 1 yuan = ¥16.5		US\$1 = ¥105		
Revenues		1,023.4	960.0		-6%
Adjusted operating income <sup>*1</sup>	[5.0%]	51.4	[8.3%]	80.0	+28.6
IFRS operating income		42.4	76.0		+33.6
EBIT		45.3	77.0		+31.7
Income before income taxes		43.0	74.0		+31.0
Net income attributable to shareholders of the parent company		31.4	55.5		+24.1
<b>Total Assets</b>		<b>1,099.3</b>	<b>1,030.0</b>		<b>-69.3</b>
Equity attributable to shareholders of the parent company		588.0	655.0		+67.0
Interest-bearing debt		202.1	—		—
D/E ratio (times)		0.34	0.5 or less		—
ROIC <sup>*2</sup>		4.1%	7.7%		+3.6%
ROE <sup>*3</sup>		5.5%	8.9%		+3.4%
CCC <sup>*4</sup>		90.7 days	81.9 days		-8.8 days
Overseas sales ratio		56%	57%		+1%
Employees		30,304	28,500		-1,804

\*1 Adjusted operating income = Revenues – Sales cost – Selling, general, & administrative expenses

\*2 Return on Invested Capital (ROIC) = Net income attributable to shareholders of the parent company / (Average of beginning and end-year interest-bearing debt + Average of beginning and end-year equity attributable to the parent company)

\*3 Return on equity attributable to shareholders of the parent company (ROE) = Net income attributable to shareholders of the parent company / Average of beginning and end-year equity attributable to shareholders of the parent company \*100

\*4 Cash Conversion Cycle (CCC) = Working capital (Trade receivables + Inventories – Trade payables) / Daily average revenues

# 2-4. Revenues, Adjusted Operating Income, and ROIC by Segment

		¥ billions	FY2018 Actual	FY2021 Plan (targets)	vs. FY2018
		Profit margin in brackets	US\$1 = ¥111 1 euro = ¥128 1 yuan = ¥16.5	US\$1 = ¥105	
Advanced Metals	Specialty Steel Products	Revenues	276.9	320.0	+16%
		Adjusted operating income	[8.1%] 22.4	[10.3%] 33.0	+10.6
		ROIC*2	6.3%	8.6%	+2.3%
	Functional Components and Equipment	Revenues	367.6	350.0	-5%
		Adjusted operating income	[2.9%] 10.5	[6.9%] 24.0	+13.5
		ROIC*2	-0.6%	6.8%	+7.4%
	Subtotal*1	Revenues	644.5	670.0	+4%
		Adjusted operating income	[5.1%] 32.9	[8.5%] 57.0	+24.1
		ROIC*2	2.7%	7.8%	+5.1%
Advanced Components and Materials	Magnetic Materials and Applications / Power Electronics	Revenues	137.0	175.0	+28%
		Adjusted operating income	[2.9%] 4.0	[12.6%] 22.0	+18.0
		ROIC*2	3.9%	8.2%	+4.3%
	Wires, Cables, and Related Products	Revenues	240.1	245.0	+2%
		Adjusted operating income	[5.2%] 12.5	[7.8%] 19.0	+6.5
		ROIC*2	8.2%	11.3%	+3.1%
	Subtotal*1	Revenues	377.1	420.0	+11%
		Adjusted operating income	[4.4%] 16.5	[9.8%] 41.0	+24.5
		ROIC*2	5.5%	9.3%	+3.8%
Others/Adjustments	Revenues	1.8	-130.0	—	
	Adjusted operating income	2.0	-18.0	—	
Total	Revenues	1,023.4	960.0	-6%	
	Adjusted operating income	[5.0%] 51.4	[8.3%] 80.0	+28.6	
	ROIC	4.1%	7.7%	+3.6%	

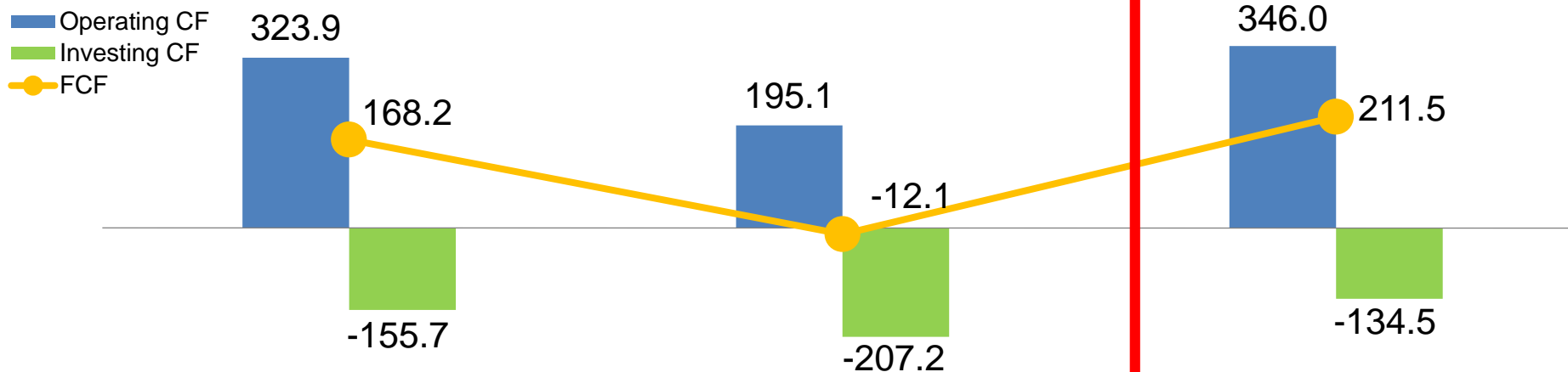
\*1 Simple sum before eliminating intersegment revenues

\*2 ROIC by segment = IFRS operating income \* (1 - Tax rate of 30%) / (Average of beginning- and end-year working capital + Average of beginning- and end-year fixed assets)

Remarks: As of April 2019, soft magnetic materials and applied products were transferred from the Specialty Steel Products segment to the Magnetic Materials and Applications / Power Electronics segment. The FY2018 actual results show the figures after the segment change.

© Hitachi Metals, Ltd. 2019. All rights reserved.

# 2-5. Cash Flow / Capital Efficiency



	FY2015 Medium-term Plan YTD Actual	FY2018 Medium-term Plan YTD Actual	FY2021 Medium-term Plan YTD Plan
Capital expenditure	-¥142.1 billion	-¥251.0 billion	-¥186.0 billion
M&A and others	-¥13.6 billion	+¥43.8 billion	+¥51.5 billion
Total investing CF	-¥155.7 billion	-¥207.2 billion	-¥134.5 billion
Depreciation	¥116.6 billion	¥140.0 billion	¥182.5 billion
R&D	¥56.8 billion	¥54.3 billion	¥59.0 billion
ROIC	9.6%	4.1%	7.7%

- Reduce inventories
- Complete reaping the benefits of investments;  
Carefully select investments in high-growth and high-profit areas
- Introduce ROIC management per business unit
- Enhance business management to improve capital efficiency

**Capital efficiency  
exceeding capital cost  
(7.5%)**

### ■ Dividends

	Interim Dividends	Year-end Dividends	Annual Dividends
<b>FY2016</b>	¥13	¥13	¥26
<b>FY2017</b>	¥13	¥13	¥26
<b>FY2018</b>	¥17	(Forecast) ¥17	(Forecast) ¥34
<b>FY2019</b>	(Forecast) ¥17	(Forecast) ¥17	(Forecast) ¥34

### ■ Policy on Shareholder Return in the FY2021 Medium-term Management Plan

Concentrate resources on high-profit and high-growth areas

Implement structural reforms and measures to build a stronger business base

Improve profit margin  
Target a dividend payout ratio of 30%

# Hitachi Metals, Ltd. Fiscal Year 2021 Medium-term Management Plan

## [Table of Contents]

1. Summary of FY2018 Medium-term Management Plan
2. Overview of FY2021 Medium-term Management Plan
- 3. Key measures**
4. Conclusion

# 3-1. Key measure 1: Concentration of resources on high-growth and high-profit areas

Address the trends of market and technology and the needs for materials  
Bring “Only 1, No. 1” products to the market through collaborative creation with customers

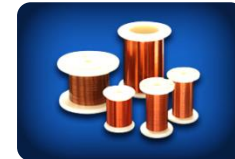
## High-efficiency combustion engine

- CVT belt materials
- Piston ring materials



## Electrification and motorization

- Electrical sensors
- Magnet wires
- Rare earth magnets
- Clad metals



## Power electronics

- SiC substrate
- SiN substrate
- Soft magnetic components and materials



## Aircraft

- Heat-resistant superalloy components and materials



- Amorphous metals for motors
- 3D additive manufacturing

- Cast iron for automobiles



Time axis

Present



\*1: NAC PJ: Next Generation Automotive Components Project: collaboration with Sales & Marketing Dept., for next-generation automobiles

\*2: PEC PJ: Power Electronics Components Project: collaboration with Sales & Marketing Dept., for alloys for electronic products



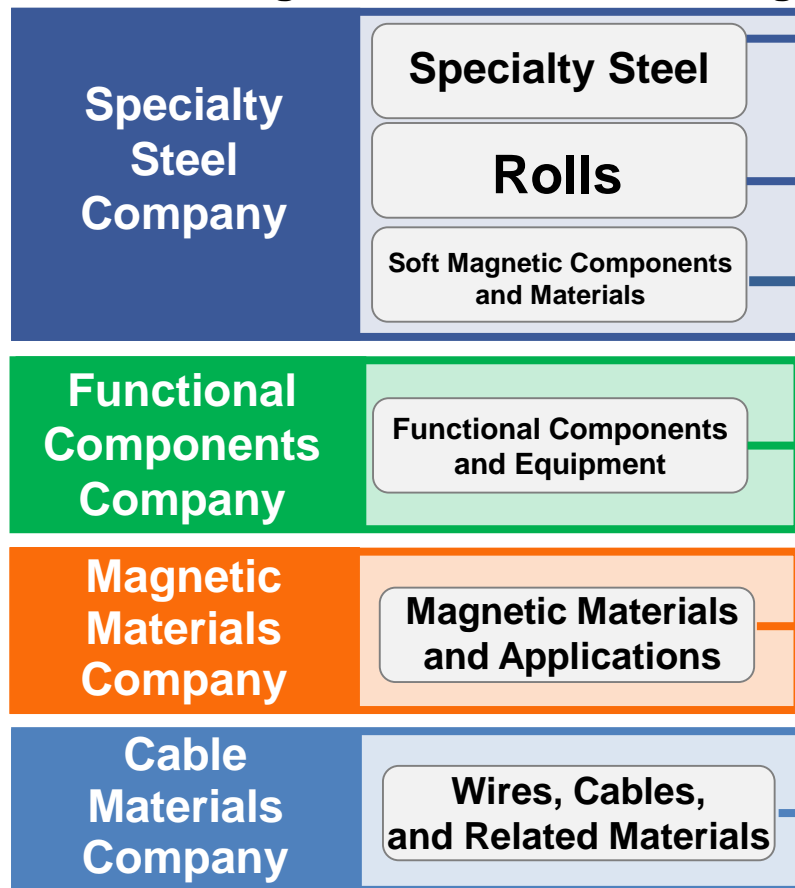
## 3-2. Key measure 2

Maximization of the synergy derived from organizational reforms

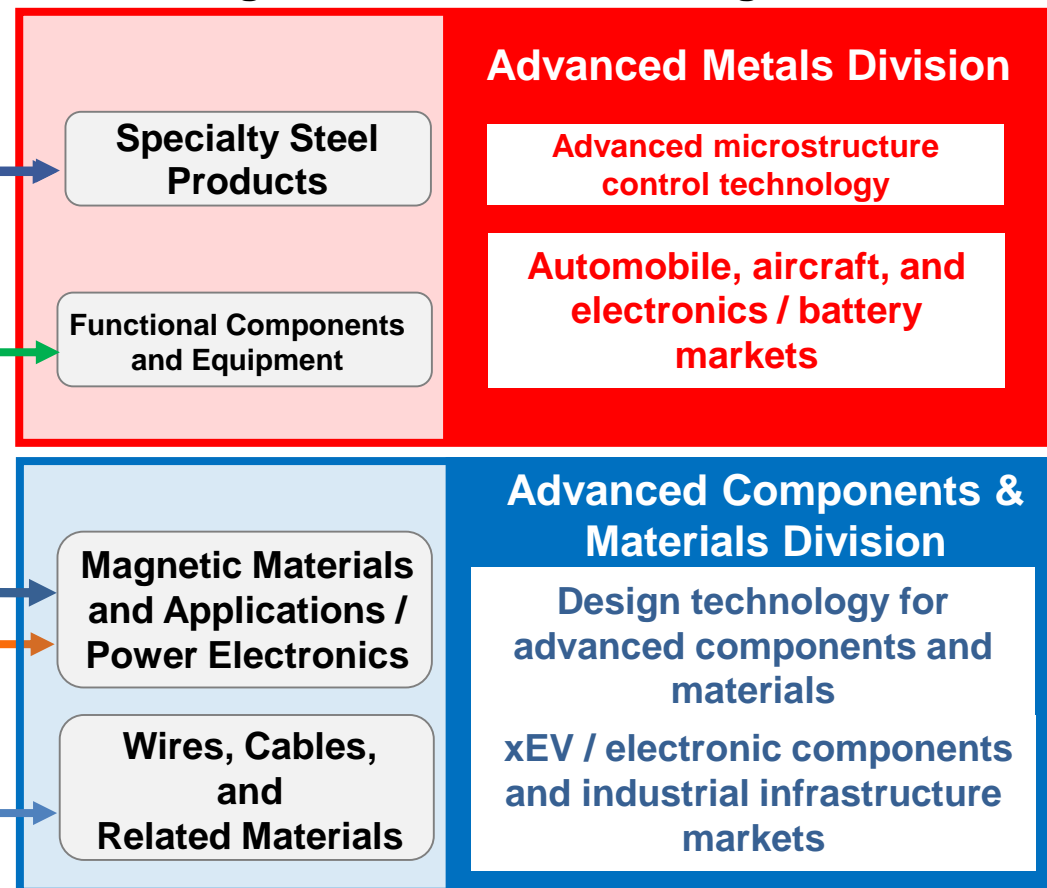
# Shift from four-company organization to two-divisional organization

- Commonality among markets / customer needs / elemental technologies  
→ maximize the synergy between segments
- Effective use of resources, enhance strategy function & governance

### ■ Before organizational restructuring



### ■ After organizational restructuring

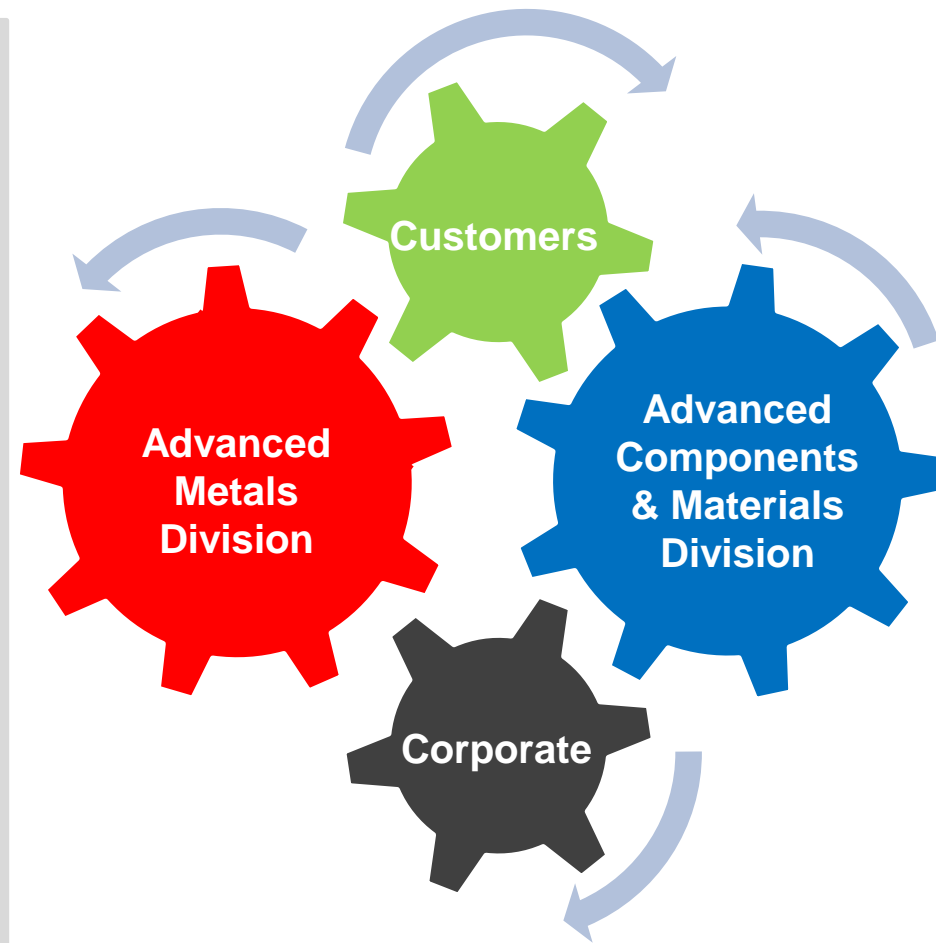


### 3-3. Key measure 2:

Maximization of the synergy derived from organizational reforms

## Accelerate the growth strategy under the division system!

- Restructuring of portfolio  
[Promote structural reforms]
  - Promote sound management by introducing multilateral KPIs
  - Downsize and withdraw from low-profit and low-growth businesses and products  
[Drastic buildup of *Monozukuri*]
  - Utilize cross-functional team
- Promote the unity of “sales and marketing,” “R&D,” and “*Monozukuri*”  
“Go beyond customer needs!”
- Talent development
  - Thoroughly pursue diversity management
  - Promote work style reforms  
“One step ahead tomorrow of where you are today!”



Create innovation by three organizations working as a unit to strengthen the management and collaborative creation with customers

## Realize “Only 1, No.1” *Monozukuri* by creating synergy between segments

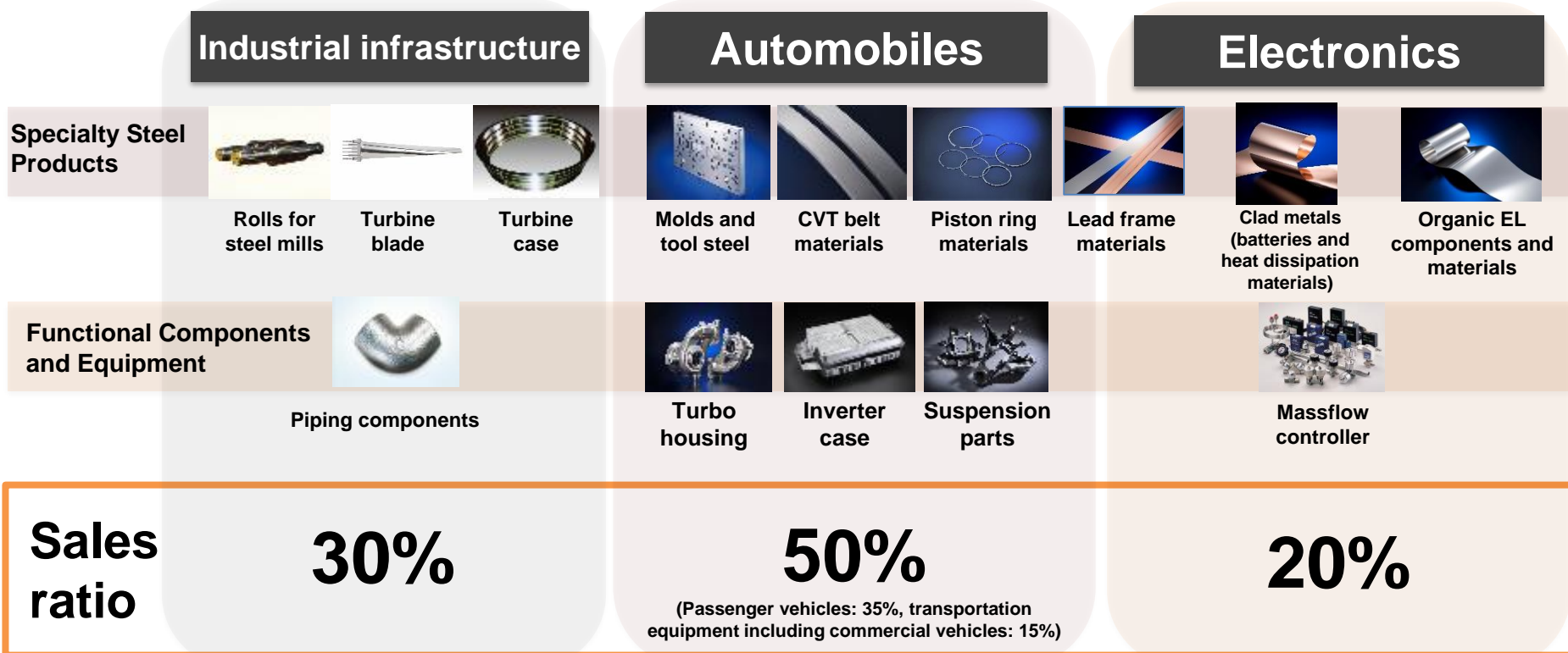
### Create synergy

- Accelerate technology fusion between each production site
- Implement a cross-selling approach for overlapping markets
- Improve management efficiency through strategic allocation of resources



### “Only 1, No. 1” *Monozukuri*

- Seek distinctiveness through materials and process innovation
- Reap the benefits of investments and ongoing restructuring of the business portfolio through selection, concentration, and fusion
- Create “new core businesses” with an eye to the future



Tool Steel & Roll	Industrial, Aerospace & Energy Materials	Electronic Materials
<p align="center"><b>Strengthen the profitable structure further by reaping the benefits of investments</b></p>		
<ul style="list-style-type: none"> <li>• <b>Molds and tool steel</b> Bring new products to the market Improve solutions</li> </ul>  <ul style="list-style-type: none"> <li>• <b>Rolls</b> Reaping the benefits of investment</li> </ul> 	<ul style="list-style-type: none"> <li>• <b>Industrial equipment</b> Acquire the largest market share of niche products</li> </ul>  <ul style="list-style-type: none"> <li>• <b>Aircraft</b> Strengthen the alliance with "Engine Primes" and promote melting certification</li> </ul> 	<ul style="list-style-type: none"> <li>• <b>Develop battery components and materials business</b> (Clad metals)</li> </ul>  <ul style="list-style-type: none"> <li>• <b>Maintain market supremacy with technical competence</b> (Organic EL components and materials)</li> </ul>  <ul style="list-style-type: none"> <li>• <b>Aim for the top global company with a lineup of Ni &amp; Copper based materials</b> (Lead frame materials)</li> </ul> 

**Segment Sales Plan**

**¥276.9 billion** (FY2018 Actual) ⇒ **¥320.0 billion** (FY2021 Plan)

## Automotive Casting Products

## Piping Components

### Shift portfolio to Growth Markets

Commercial vehicles	An increase in demand for transportation
Farming and construction machinery	Population growth → an increase in crop yield
Railway	Demand rises around the world
Industrial equipment	An increase in demand for complicated shaped products

**Expand the heavy-duty areas**  
 (commercial vehicles, farming machinery, construction machinery, railways, and industrial equipment)

**Address the needs for high added value**

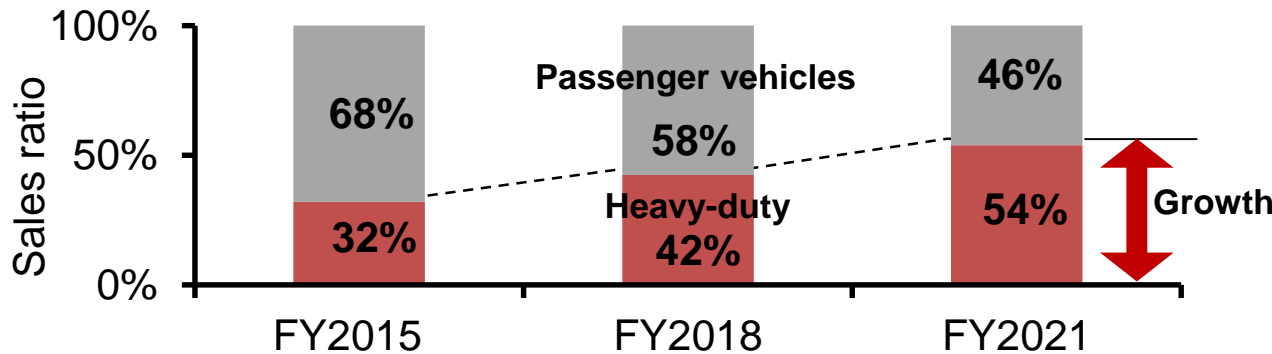
**Develop distribution channels for flexible piping components in Europe and China**



**Develop new products to meet the needs of customers**



**High corrosion resistant valves with additive manufacturing of high corrosion resistant nickel base alloy MAT21®**

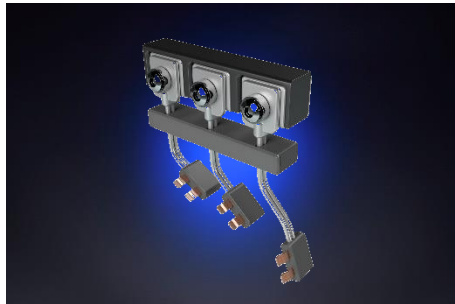


Waupaca's sales portfolio

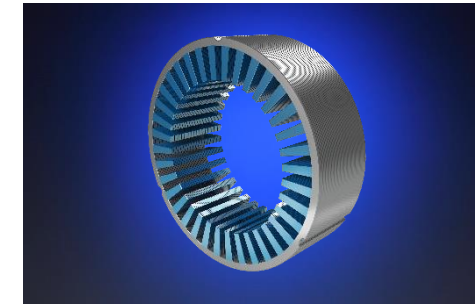
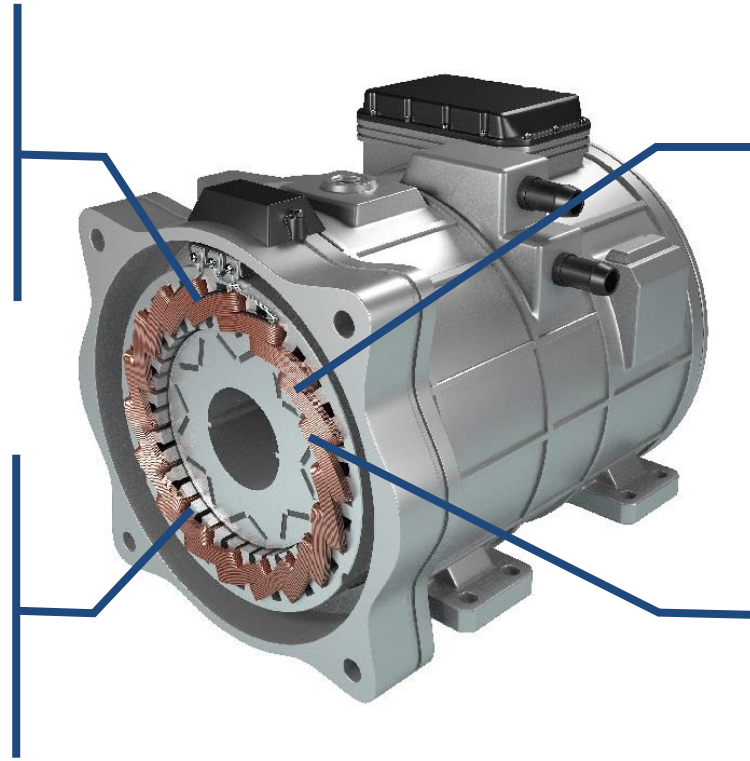
### Segment Sales Plan

**¥367.6 billion** (FY2018 Actual) ⇒ **¥350.0 billion** (FY2021 Plan)

Create synergy among Magnets / Power Electronics /  
Wires, Cables, and Related Products



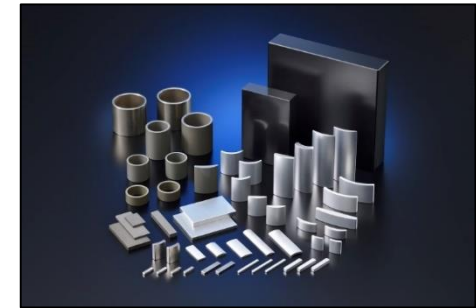
**Feed Assy**



**Amorphous metals**



**Magnet wires**



**Magnets**

Deeply cultivate the automotive and industrial infrastructure markets with  
the design technology of advanced components and materials at the core



Increase production capacity of the power electronics materials and improve the profitability of the magnets materials business

## Expand the power electronics materials business

### FINEMET® Ribbon

- Launch full-scale operation of new facility

### Soft Magnetic Components and Materials and Applied Products

- Expand production sites in Thailand
- Launch production in Philippines

### Ceramic components

- Increase production capacity of SiN substrate

Contribute to increasing efficiency of in-vehicle parts



Develop highly-efficient (3.8 kW/L) OBC jointly with Fraunhofer IISB



Develop high thermal conductive (130 W/m·K) SiN substrate for power module

## Improve the profitability of the magnets business

### Magnetic materials

- Increase production efficiency of new line
- Optimize the global production system

## Segment Sales Plan

¥137.0 billion (FY2018 Actual) ⇒ ¥175.0 billion (FY2021 Plan)



## Expand the businesses in the five growth areas

Growth area		Strategy
Automotive electronic components		Develop and expand sales of electronic components and xEV-related products
Magnet wires		Boost the competitiveness of xEV using HiFC <sup>®</sup> and high-speed production line
Medical devices		Expand sales of complex tube and cable products
Rolling stock		Expand sales in Europe and open a new market in the Southeast Asia in addition to China
Wires/cables for FA/robots		Increase market share with technology, featuring thinner and lighter design and longer-life performance

### Segment Sales Plan

¥240.1 billion (FY2018 Actual) ⇒ ¥245.0 billion (FY2021 Plan)

Sales ratio of the growth areas 40% ⇒ 50% (FY2018 Actual ⇒ FY2021 Plan)

## 3-10. Key measure 3: Take best advantage of large-scale capital investment

# Complete reaping the benefits of investments in the FY2018 Medium-term Management Plan

## ■ Main capital investment projects in the FY2018 Medium-term Management Plan

No	Investment project	Total investment	Mass production/ Operation started	Current conditions	Action
1	Yasugi Works large-scale operation	¥38.0 billion	2017 to 2020 / first half	<ul style="list-style-type: none"> <li>▪ Launch of the facility is on schedule</li> <li>▪ A decline in demand; ingot casting volume has not been achieved</li> </ul>	<ul style="list-style-type: none"> <li>▪ Reap the benefits of the investment with “Only 1” product group</li> <li>▪ Secure orders with new specifications</li> </ul>
2	Alloys for electronic products Clad metals production line with increased capacity	¥7.5 billion	2018 / second half	<ul style="list-style-type: none"> <li>▪ Launch of the facility is on schedule</li> <li>▪ A significant decline in demand for smartphone use</li> </ul>	<ul style="list-style-type: none"> <li>▪ Growing demand for in-vehicle batteries &amp; acquire the customers</li> </ul>
3	Wires, Cables, and Related Products Continuous casting & rolling line	¥5.0 billion	2018 / first half	<ul style="list-style-type: none"> <li>▪ Semi-mass production</li> </ul>	<ul style="list-style-type: none"> <li>▪ Promptly acquire customer certification</li> </ul>
4	New magnets production line	¥18.0 billion	2018 / first half	<ul style="list-style-type: none"> <li>▪ Improving the profitability</li> </ul>	<ul style="list-style-type: none"> <li>▪ Improve profitability</li> </ul>

Shift to carefully selected investments in high-growth and high-profit areas

# 3-11. Key measure 4: Strengthen front-line operations and create collaboratively with customers

Corporate-wide function between “sales and marketing,” “R&D,” and “*Monozukuri*”  
 Collaboration with customers by strengthening front-line operations and realization of *Monozukuri* that supports this collaboration

		Advanced Metals	Advanced Components & Materials
Sales and marketing	<ul style="list-style-type: none"> <li>Enhance cross-divisional collaboration                             <ul style="list-style-type: none"> <li>NAC Project</li> <li>PEC Project</li> </ul> </li> <li>Establish an account sales system</li> </ul>		
R&D	<ul style="list-style-type: none"> <li>Integrate a material development team and a process development team                             <ul style="list-style-type: none"> <li>Develop into a production process using cutting-edge technology</li> </ul> </li> <li>Promote collaborative creation with research institutions, universities, and companies</li> </ul>		
Monozukuri	<ul style="list-style-type: none"> <li><i>Monozukuri</i> buildup project                             <ul style="list-style-type: none"> <li>Improve quality with a focus on key areas</li> <li>Utilization of “Lumada,” which is an IoT platform built by Hitachi Ltd.:                                     <ul style="list-style-type: none"> <li>Automation of production plan → man-hour reduction</li> <li>Optimization of production conditions → Improvement in yield ratio</li> </ul> </li> </ul> </li> <li>Pursue <i>Monozukuri</i> <b>with safety as the first priority</b> <ul style="list-style-type: none"> <li>Investment to ensure intrinsic safety ¥2.0 billion/year</li> </ul> </li> </ul>	<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Master advanced microstructure control technology</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Master advanced components and materials design technology</div> </div>	

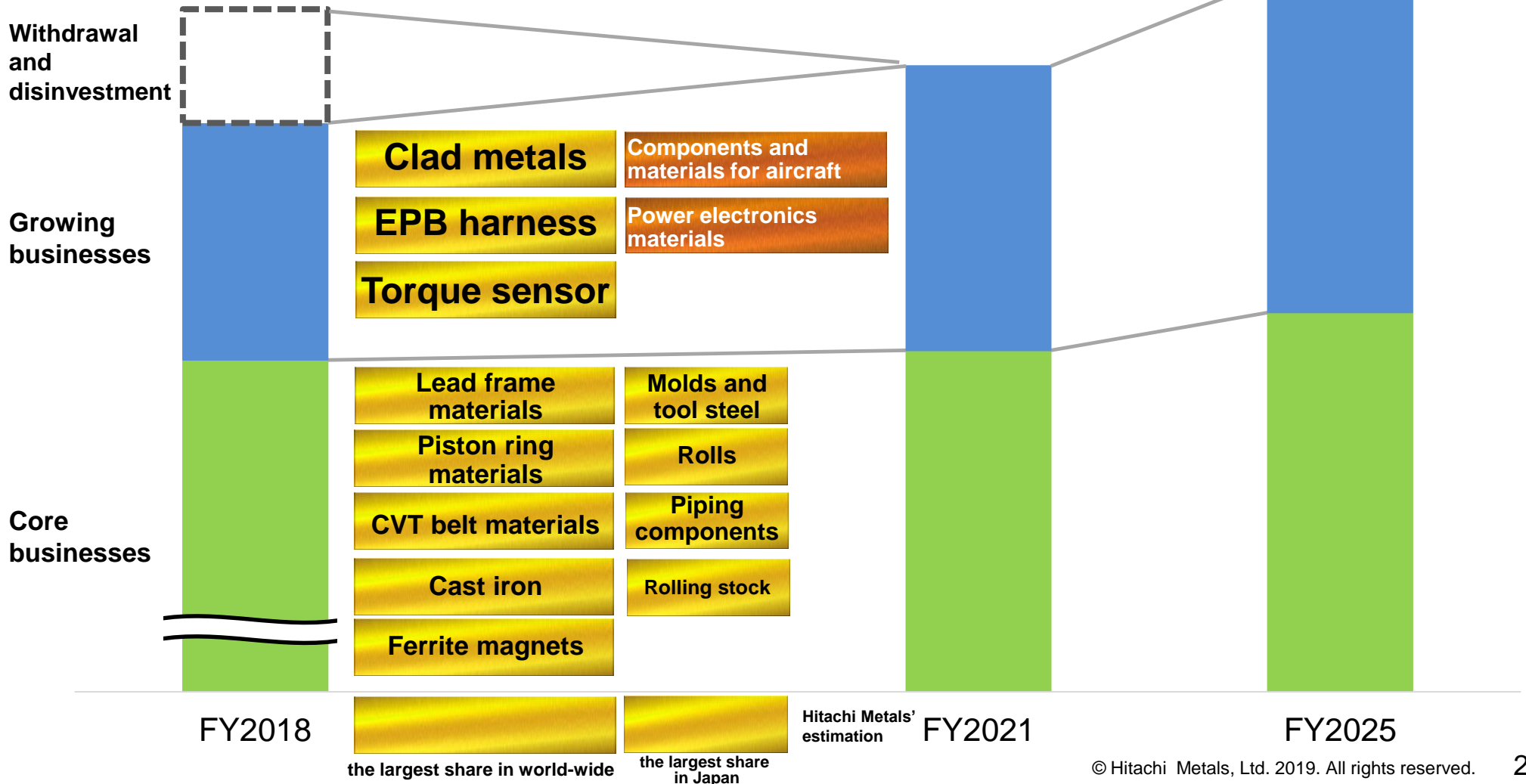
# 3-12. Key measure 5: Implementation of structural reforms and measures to build a stronger business base

## Restructuring a profitable portfolio by accomplishing "Only 1, No. 1"

¥1,022.5 billion [5.0%]

¥960.0 billion [8.3%]

[10%]

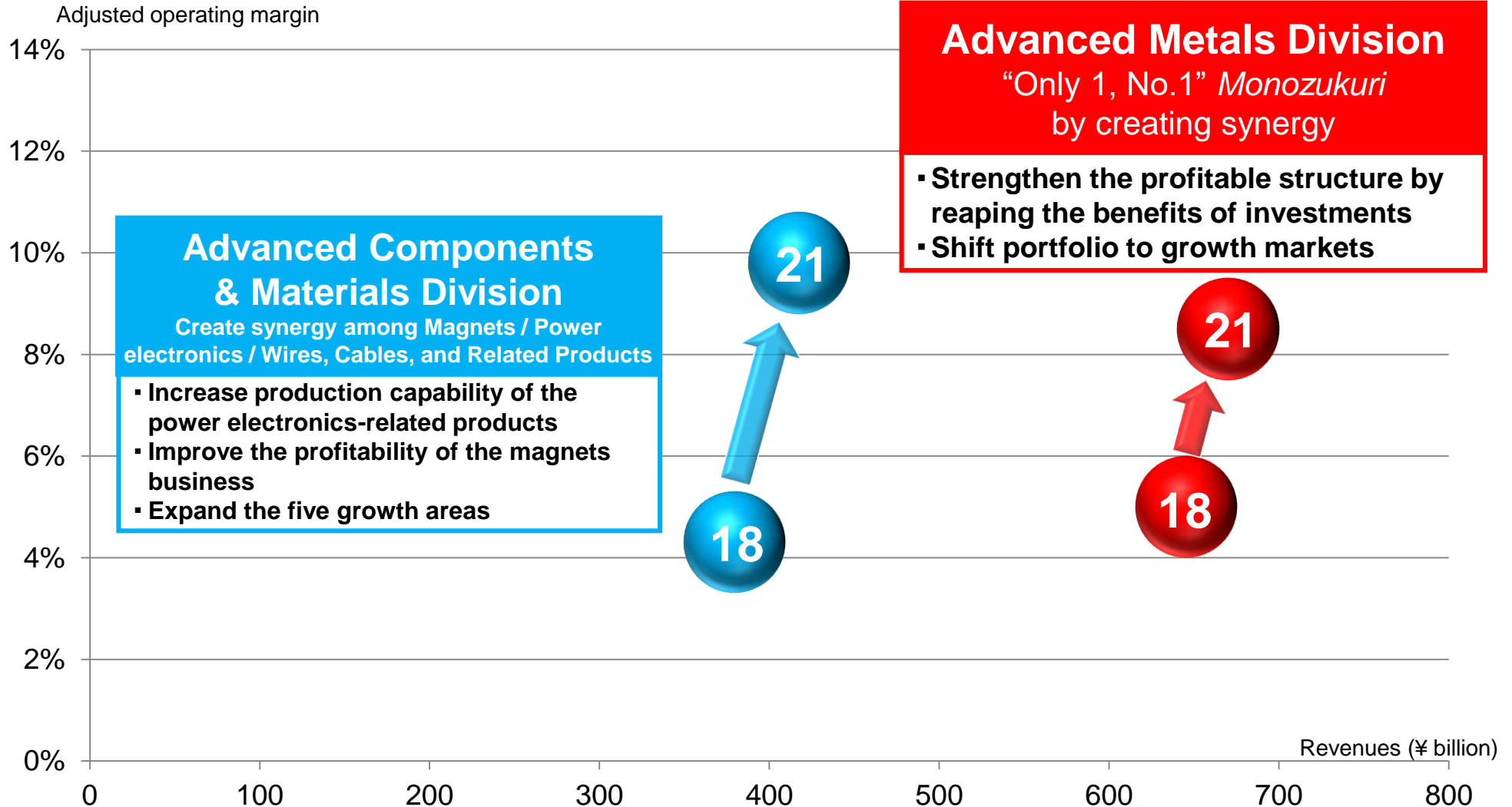


# Hitachi Metals, Ltd. Fiscal Year 2021 Medium-term Management Plan

## [Table of Contents]

1. Summary of FY2018 Medium-term Management Plan
2. Overview of FY2021 Medium-term Management Plan
3. Key measures
4. **Conclusion**

## Improvement of profitability through synergy among segments



# **A High-performance Materials Company Supporting Sustainable Societies**

**– Building People, Building Innovation, and Building the Future –**

**Expand “Only 1, No. 1” businesses and products**

## **Financial Targets in FY2021**

**Revenues: ¥960.0 billion**

**Adjusted operating income: ¥80.0 billion (8.3%)**

**ROIC: 7.7%**



**This document contains forward-looking statements, such as results forecasts, management plans and dividend forecasts, that are not historical facts.**

**All such forward-looking statements are based upon all available information and upon assumptions and projections that were deemed reasonable at the time the Company prepared this document.**

**Changes to the underlying assumptions or circumstances could cause the actual results to differ substantially. The factors causing such differences include, but are not limited to, the following:**

- **Risks associated with market conditions related to product demand**
- **Risks associated with changes in raw material prices**
- **Risks associated with financing activities**
- **Risks associated with changes in foreign exchange rates**
- **Risks associated with changes in the value of securities**
- **Risks associated with the global expansion of businesses**
- **Risks associated with competitiveness and development and commercialization of new technologies and products**
- **Risks associated with intellectual property rights**
- **Risks associated with environmental regulations**
- **Risks associated with product defects**
- **Risks associated with laws and regulations, and official regulations**
- **Risks associated with earthquakes and other natural disasters**
- **Risks associated with information security**
- **Risks associated with retirement benefit obligations**
- **Risks associated with relationship with the parent company**
- **Risks associated with M&A**
- **Risks associated with securing talent**