

Business Strategy of the Magnetic Materials Company

Hitachi Metals IR Day 2018

May 25, 2018

Hitachi Metals, Ltd.

Ryoji Akada

Executive Officer

President of the Magnetic Materials Company

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1. Basic Policy of the Company
2. Market Environment
3. FY2018 Action Plan
4. FY2025 VISION
5. Summary

1-1. Medium-Term Management Plan: Basic Policy and Goals of the Company

■ Basic Policy of the Magnetic Materials Company

Innovate *monozukuri* to pave the way for growth

- ◆ Strengthen the global production system
- ◆ Build innovative production lines

■ 2018 Medium-Term Management Plan: Goals

	FY2016 actual (¥108 = US\$1)	FY2017 actual (¥111 = US\$1)	FY2018 forecast (¥110 = US\$1)	Change vs. FY2017
Revenues	¥99.8 bn	¥106.1 bn	¥115.0 bn	+8.4%
Adjusted operating income	¥9.3 bn	¥9.6 bn	¥7.5 bn	-¥2.1 bn
Adjusted operating margin	9.3%	9.0%	6.5%	-2.5%
Overseas sales ratio	53%	51%	58%	+7.0%

**Strengthening of
global production
system**

**Established Hitachi Metals San Huan
Magnetic Materials (Nantong) Co., Ltd.**
(Opened Apr 2017; started mass production in 2018)

**Building of
innovative
production line**

**Introduced an innovative production line in the
Kumagaya district**

- Neodymium magnets (Started mass production in 2H 2018)
- Ferrite magnets (Started mass production in Apr 2018)

**Optimization of
material flow**

Made Santoku Corporation a subsidiary
(Apr 2018)

**Creation of
“mother plant”**

**Integrated Magnetic Materials
Research Laboratory with Kumagaya
Works** (Move completed in Apr 2018)

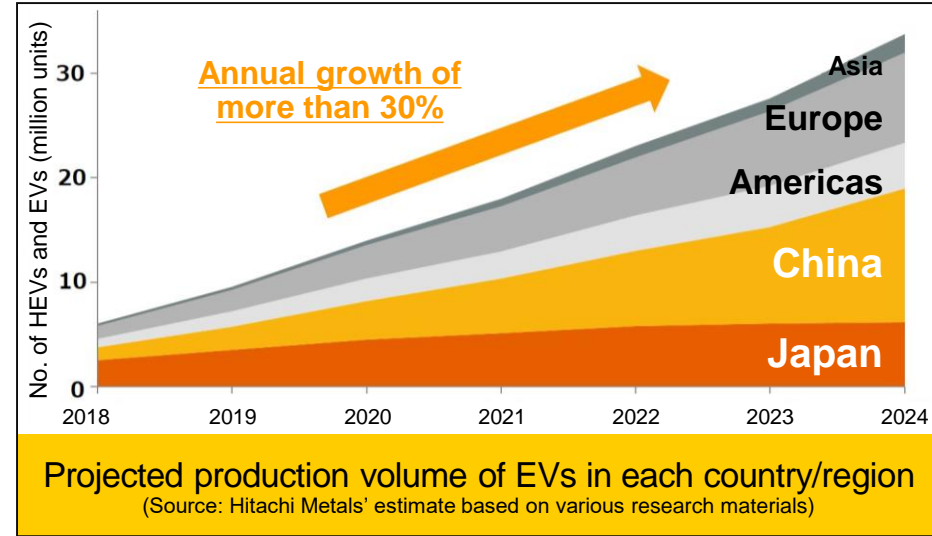
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Global surge in demand for EVs*

Industrial infrastructure-related also strong due to robust capital expenditure



Response to the surge in demand is urgently required

Productivity improvement, capacity increase
(China base, innovative production line)

In-house manufacturing of raw materials (incl. recycled)
(Acquisition of Santoku as a subsidiary)

Evolution of rare earth-saving technology
(Concentration of R&D/production in Kumagaya district)

*Including term for hybrid electric vehicles (HEV) and plug-in hybrid electric vehicles (PHEV)

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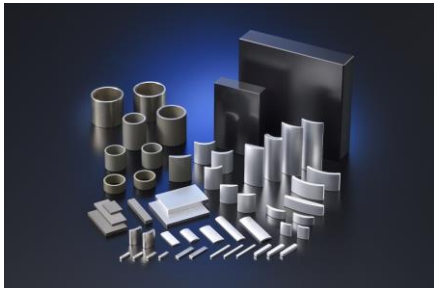
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Carry out monozukuri innovations: Innovative production line

Improve quality and maximize productivity through thorough automation and use of IoT

Neodymium magnets

- ◆ Adopt new diffusion process for heavy rare-earth
- ◆ Production line specializing in mass production
- ◆ Further line expansion planned



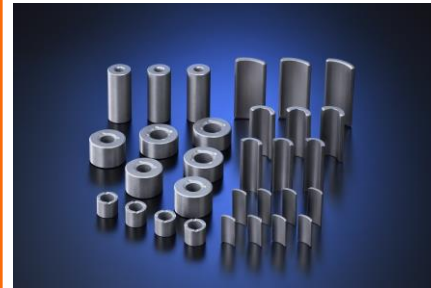
Neodymium magnet NEOMAX®



Mass production in 2H FY2018

Ferrite magnets

- ◆ Enhance production lines to address small and thin shapes
- ◆ Quality and trend management using IoT technology
- ◆ Further line expansion planned



Ferrite magnet NMF™



Mass production in Apr 2018

Synergies from the acquisition of Santoku as a subsidiary

Procurement

Reduction of procurement cost by consolidating procurement of raw materials

Process management

Reduction of work-in-progress due to reduced lead time through unified management

Production

Increased production volume due to concentration of alloy production/recycling
Reduction of processing cost due to enhancement of recycling process

Technology

Acceleration of product sophistication due to an integrated development system

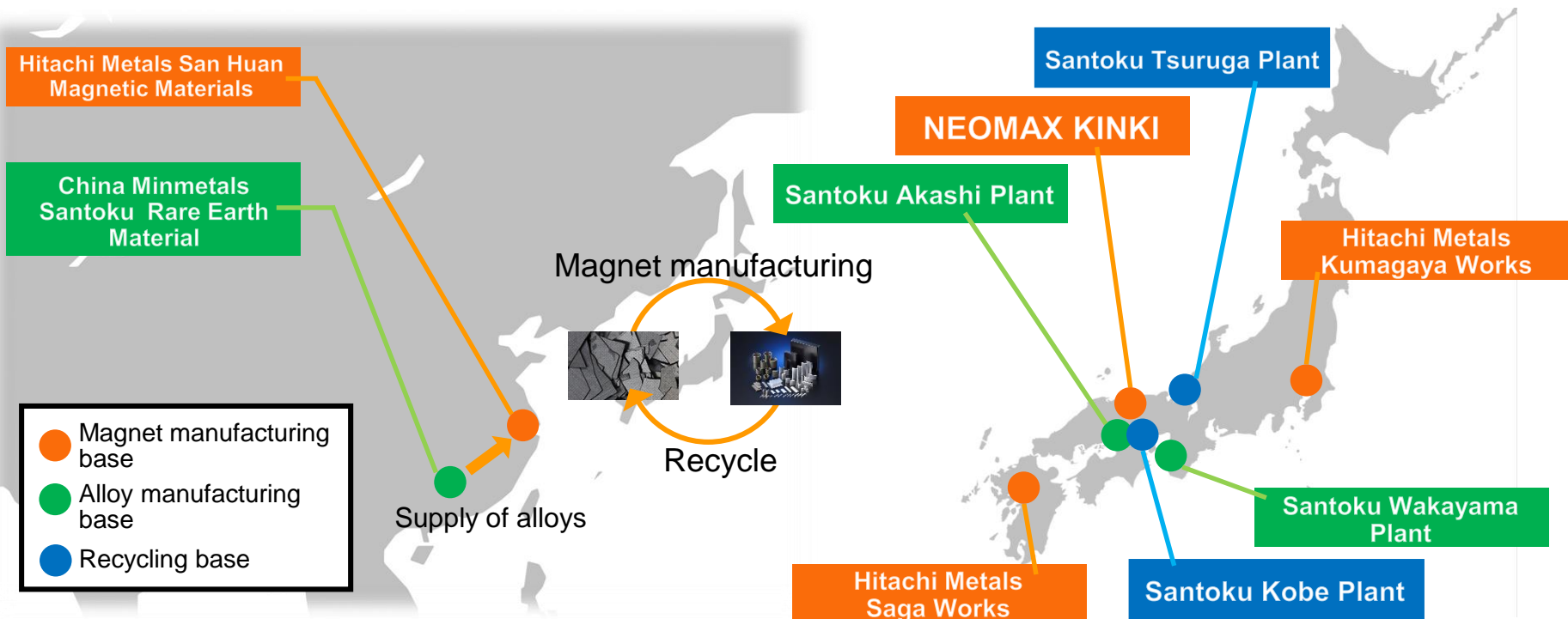
Strengthen business platform by handling the raw materials process internally

3-3. Growth Strategy and Action Plan (2)

Optimize material flow

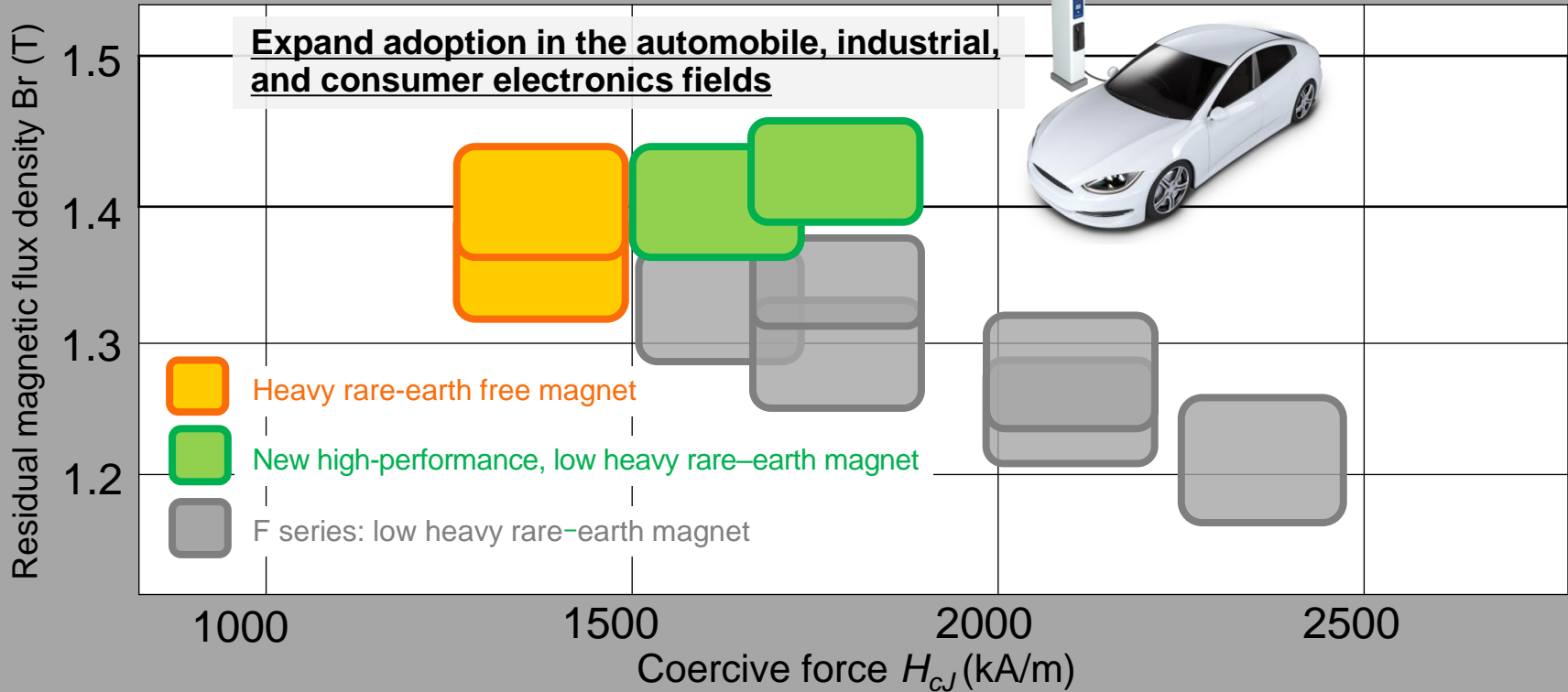
Japan Improve magnet production efficiency through an integrated process

China Establish a production system from magnet alloys to magnets



Promote heavy rare-earth free and low heavy rare-earth magnets

■ NEOMAX® F series



Achieve resource-saving and high performance

Strengthen global production system

Achieve competitive products with the same quality as Japan's

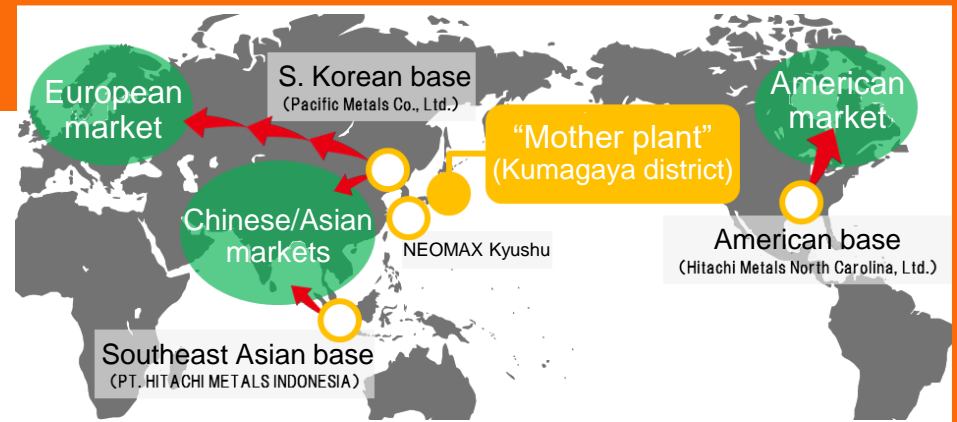
Neodymium magnets: Expand China business

- ◆ Full-scale mass production from 2H 2018
- ◆ Introduce new diffusion process for heavy rare earth
- ◆ Further line expansion planned
(Capacity: 2,000 tons/year in FY2024)



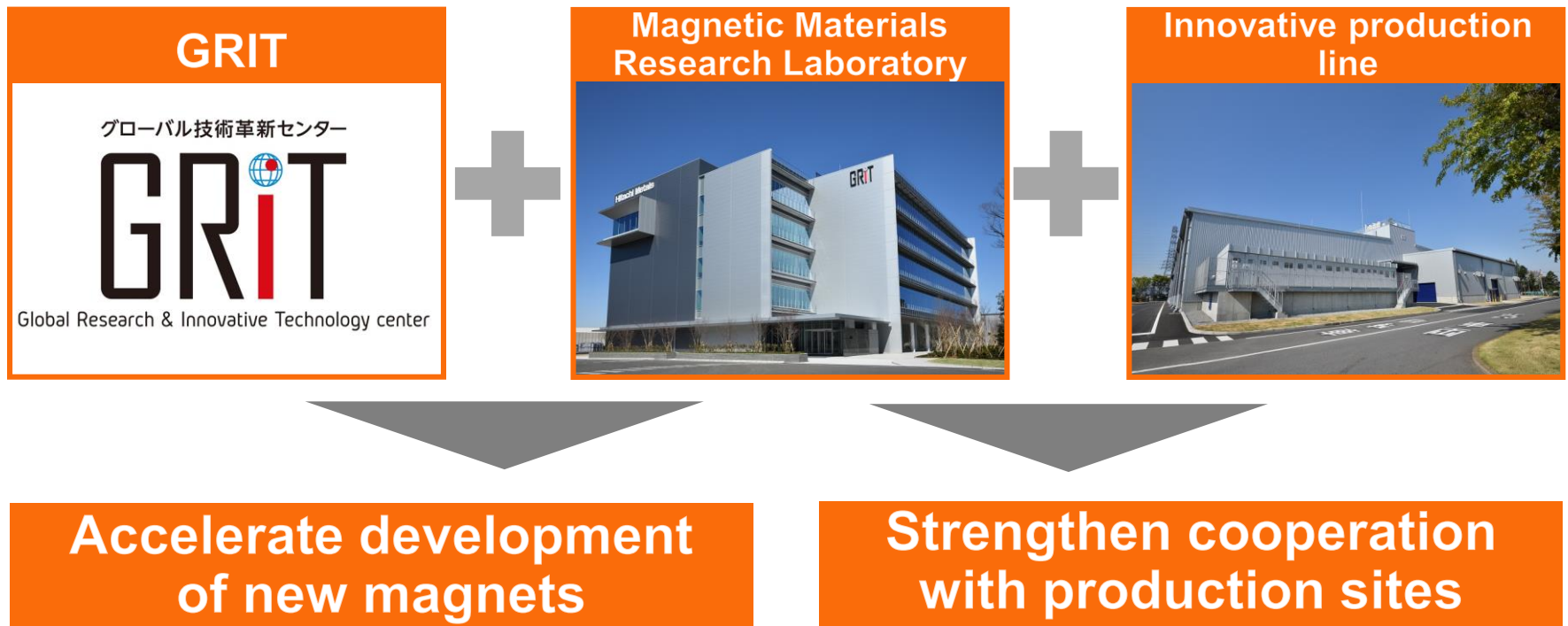
Ferrite magnets: Strengthen global production system

- ◆ Roll out the innovative production technology across the Group to achieve globally identical quality and cost
- ◆ Increase share of global customers
- ◆ Capacity investment in response to growth markets
(Capacity: 4,100 tons/month in FY2016 ⇒ 5,200 tons/month in FY2024)



Turn the Kumagaya district into a “mother plant”

Accelerate development of technology that meets customer needs



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Increase share in growth markets to expand business scale

FY2025 revenues target: ¥200.0 bn

(FY2016 actual: ¥99.8 bn ⇒ FY2018 forecast: ¥115.0 bn)

Lead the market with the top performance neodymium magnets

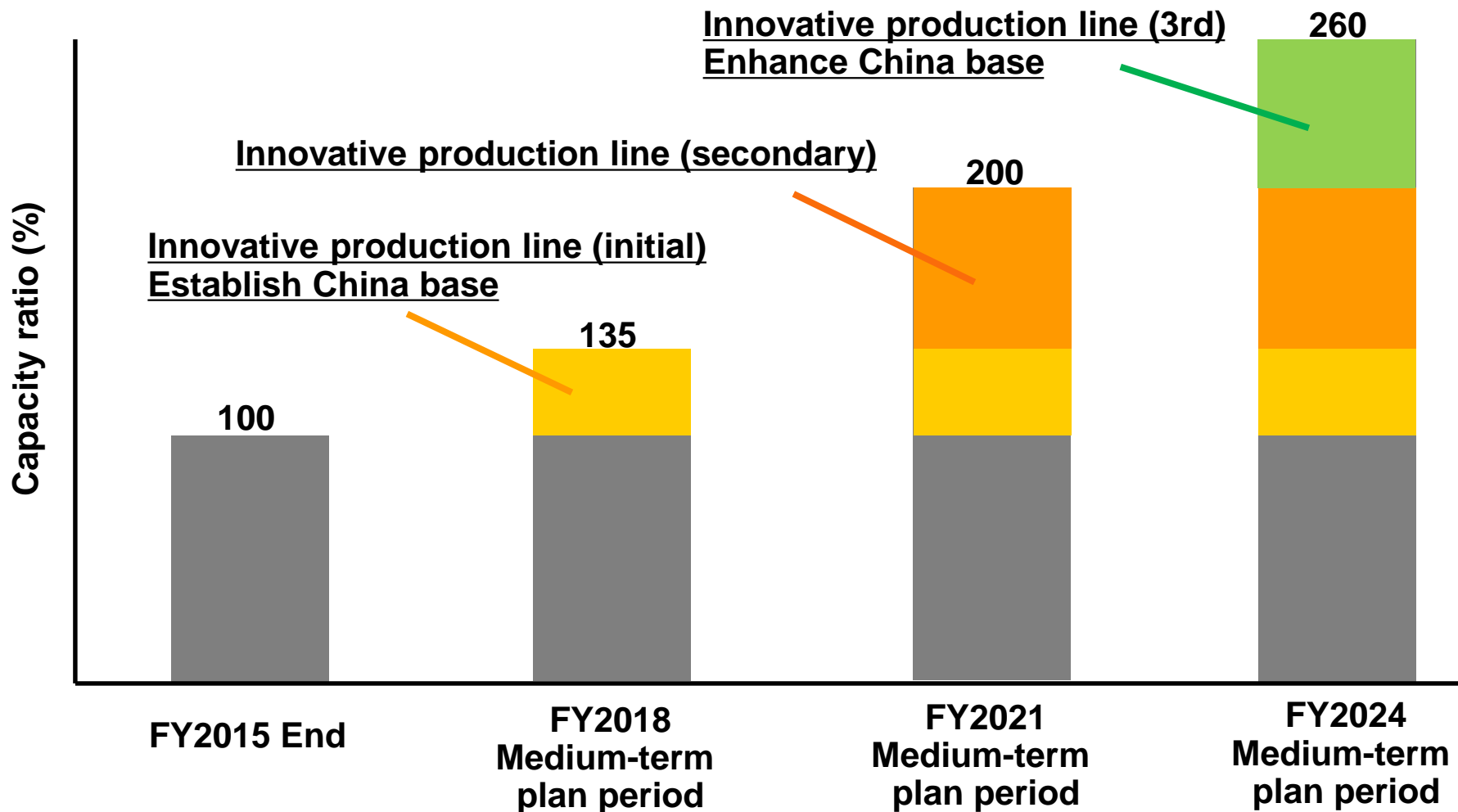
**Productivity improvement, increased capacity
(Target: More than 2.5x vs. FY2015)**

In-house manufacturing of raw materials

Evolution of heavy rare earth-saving technology

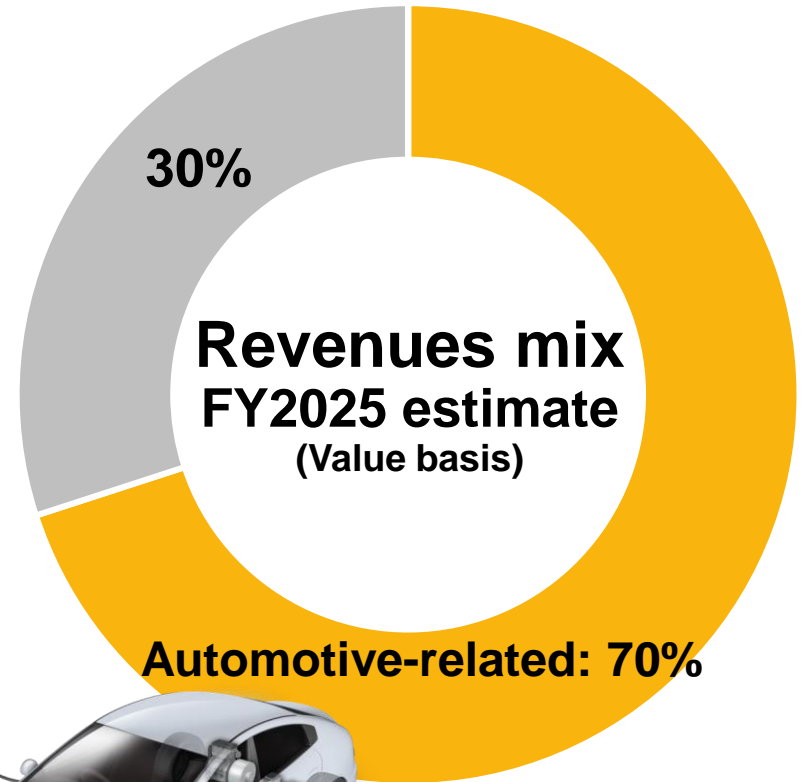
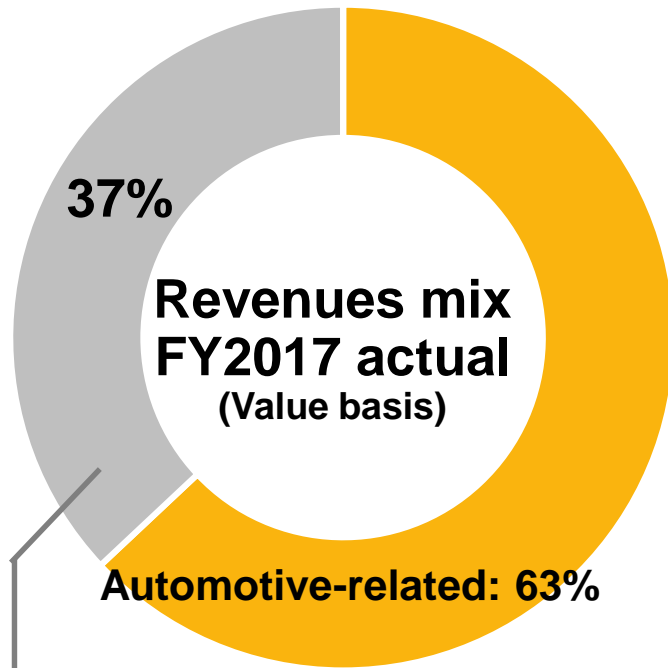
4-2. Neodymium Magnet Production Capacity Enhancement Plan

Increase capacity by more than 2.5x by the end of FY2024



Note: The figures in the chart represent the production capacity of each medium-term plan period with the capacity of FY2015 as 100.

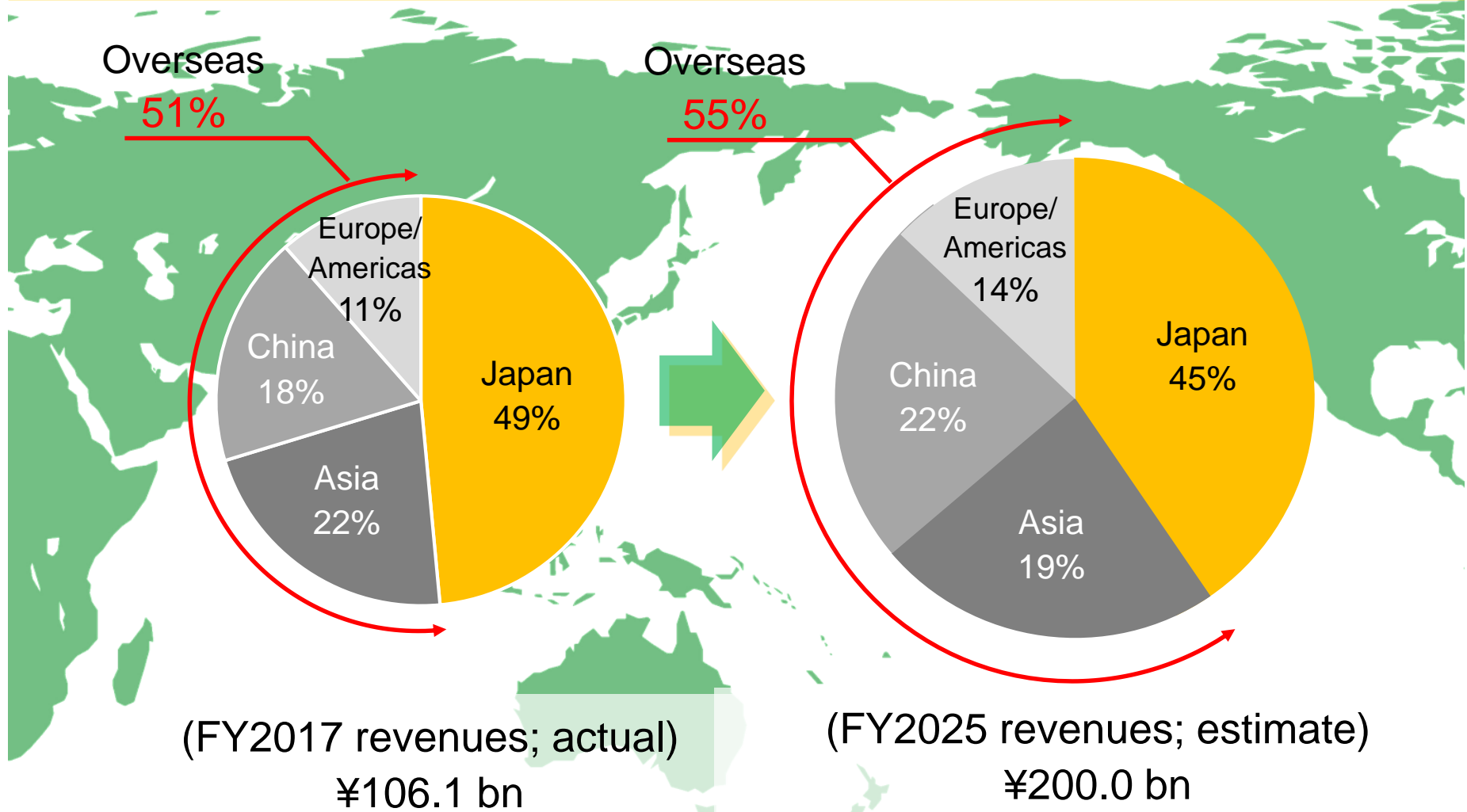
Significant increase of automotive-related



Industrial infrastructure-related,
electronics-related, etc.

4-4. Regional Sales

Expand revenues in Chinese and European/American markets



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Magnetic Materials Company

Innovate *monozukuri* to pave the way for growth

FY2018 outlook

Revenues

¥115.0 bn

Adjusted operating income
(Adjusted operating margin)

¥7.5 bn
(6.5%)

Overseas sales ratio

58%

This document contains forward-looking statements—such as results forecasts and management plans—that are not historical facts. All such forward-looking statements are based upon 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. Factors causing such differences include, but are not limited to, the following:

- Changes in economic conditions and regulations in the main markets where the Company operates, particularly Japan, the United States, Asia and Europe
- Sudden changes in technological trends
- Changes in the competitive advantage and the capabilities of the Company and its subsidiaries and affiliates to develop and commercialize new products and businesses
- Fluctuations in the status of product markets, exchange rates and international commodity markets
- Changes in the financing environment
- The capability of the Company and its subsidiaries and affiliates to cope with fluctuations in product supply and demand, the status of product markets, exchange rates and international commodity markets
- Protection of the Company's intellectual property, and securing of licenses to use the intellectual property of other parties
- Changes in the status of alliances with other parties for product development, etc.
- Fluctuations in Japanese stock markets