

# **Business Strategy of the Cable Materials Company**

**Hitachi Metals IR Day 2016**

**June 3, 2016**

**Hitachi Metals, Ltd.**

**Kazuya Murakami**

**Executive Officer**

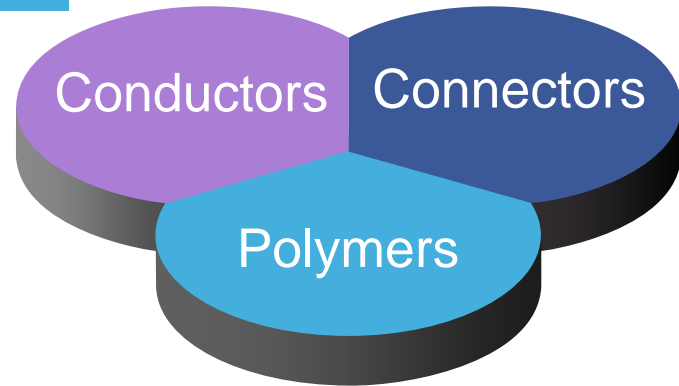
**President of the Cable Materials Company**

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## Core competencies in cable materials



### Industrial infrastructure

Contribute to building safe, highly efficient infrastructure



Wires and cables for rolling stock

### Electronics

Contribute to making devices smaller and more convenient



Wires and cables for medical devices

### Automotive

Contribute to building a safe, secure automobile-based society



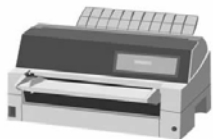
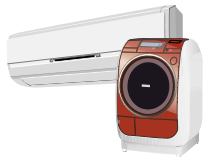
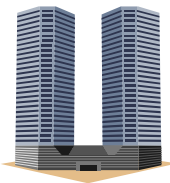
EPB harnesses

**Aim for expansion in the cornerstone segments of rolling stock, medical, and automotive electronic components**

## Core Products

Main product groups:

- Wires/cables for construction
- Wires/cables for electronics
- Magnet wires
- Industrial rubber



## Growth Areas

Main product groups:

- Wires/cables for rolling stock
- Wires/cables for medical devices
- Automotive electronic components



## Information Systems, etc.

- Ethernet switches, etc.

**Wires,  
Cables &  
Related Products:**

**FY2015  
Revenues:  
¥288.2 bn**

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## 2. Market Environment

<b>High-speed railway</b>	Various countries around the world have plans to build high-speed railways. Average annual growth of around 3% is projected over the next 20 years.
<b>Medical devices</b>	Average annual growth of 5% is projected as a result of the aging of society and increasing sophistication of medical devices.
<b>Automotive</b>	The need for materials and technologies that will enable lighter weight vehicles and improve fuel efficiency is expanding.

		2010	2015	2020
<b>High-speed railway plans</b>		• China CRH	• UK IEP	• Southern U.S. • Western India • Western U.S.
<b>Medical devices</b>			• High-resolution diagnostic imaging • Increasing sophistication of treatment and diagnosis	• Medical resuscitation devices
<b>Automotive</b>	<b>CO<sub>2</sub> emissions regulations</b>	European regulations	• 130 g/km	• 95 g/km
	<b>Standards for measuring fuel efficiency</b>	Individual standards (JC08/NEDC, etc.)		Toward a common global standard (WLTC)
<b>Demand for wires, cables, and related products</b>	<b>Wires/cables for rolling stock</b>	• Meet EN standards	• Thinner non-halogen cables	• Ultra-light cables
	<b>Wires/cables for medical devices</b>	• Cables/wires with high conductivity & high tensile strength • High-density (Micro-coaxial and optical cable)		• Multi-functional catheters
	<b>Automotive electronic components</b>	• Lighter weight (aluminum conductors)		• For high heat resistance (in the area surrounding the engine)

Source: Hitachi Metals projections based on data published by regulatory authorities in various countries and regions, and data from various market surveys

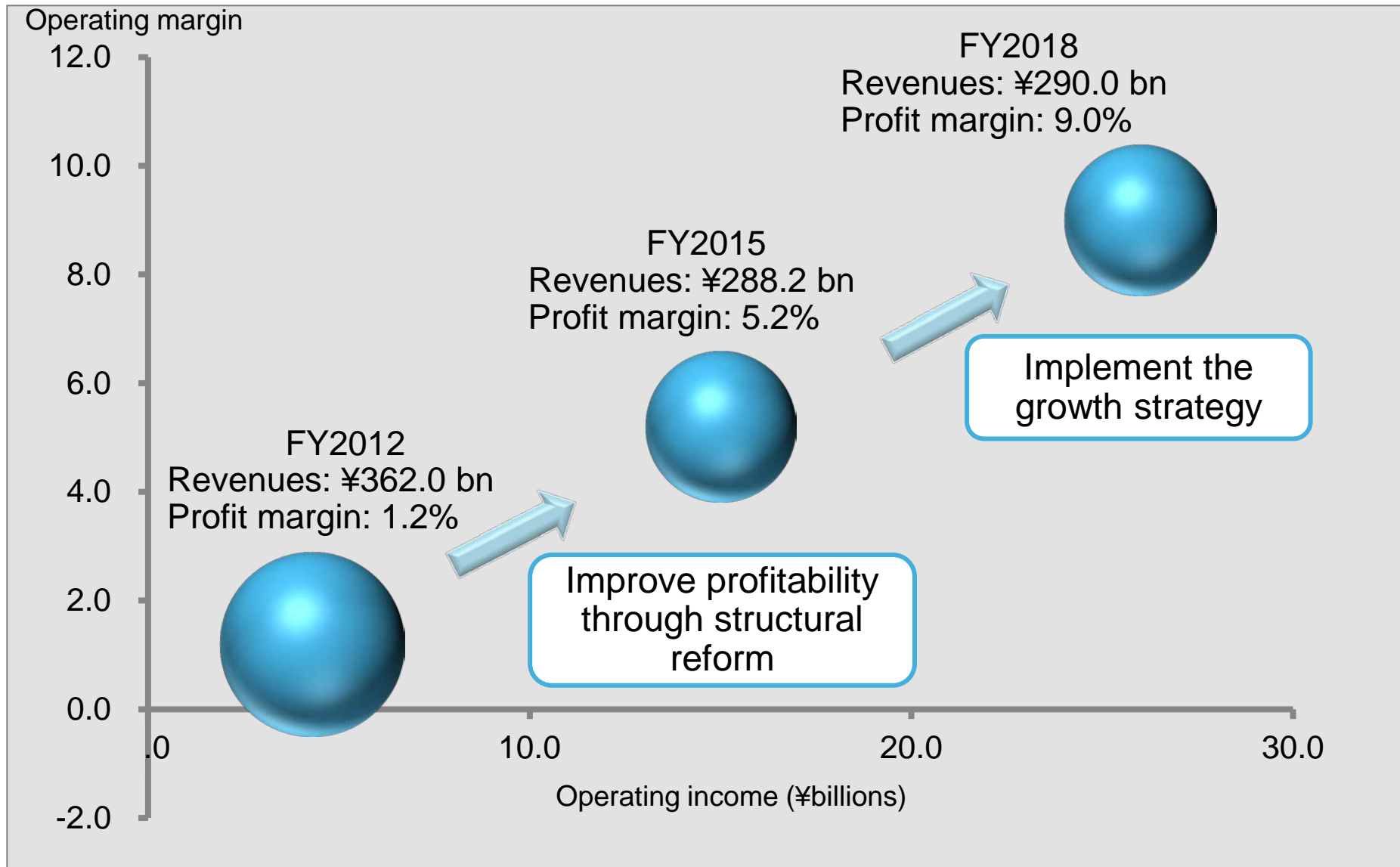
CRH: China Railway High-speed, IEP: Intercity Express Programme, NEDC: New European Driving Cycle, WLTC: Worldwide harmonized Light duty driving Test Cycle

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# 3-1. Improvement in Profitability Achieved and Plan (FY2012 ⇒ FY2018)



\* FY2012: Japanese GAAP; FY2015 and FY2018: IFRS standard  
\* Circle size: Size of revenues



### ■ Basic Policy and Growth Strategy of the Cable Materials Company

**Reform to aim for high profitability:  
Let's achieve true global growth!**

- Implement a global growth strategy
- Strengthen the profit structure by restructuring the business portfolio
- Strengthen *monozukuri* through innovations in manufacturing processes

### ■ FY2018 Medium-Term Management Plan: Goals

	FY2015 Actual (¥120 = US\$1)	FY2018 Goal (¥115 = US\$1)	Change vs. FY2015
Revenues	¥288.2 bn	¥290.0 bn	101%
Adjusted operating income	¥15.0 bn	¥26.0 bn	+ ¥11.0 bn
Adjusted operating margin	5.2%	9.0%	+3.8%
Overseas sales as a % of total sales	32%	38%	+6%

## ■ Main Action Plan

<b>Growth Areas</b>	<b>Rolling Stock</b>	Expand business in the Chinese and European markets
	<b>Medical Devices</b>	Enter new areas of medical treatment and expand business domains
	<b>Automotive Electronic Components</b>	Strengthen the global production and supply structure
<b>Core Products</b>		Enhance competitiveness through innovation in manufacturing processes
		Take decisive action to achieve structural reform

### 3-4. Rolling Stock:

## Expand Business in the Chinese and European Markets (1)

### ■ Expand share in Chinese rolling stock manufacturers

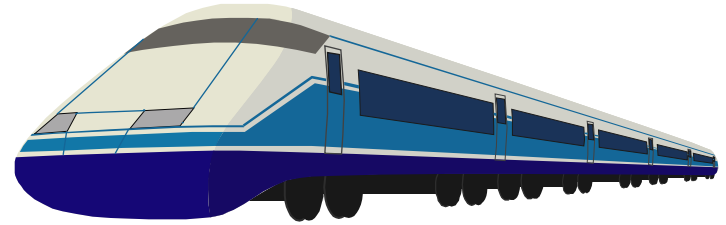
China: 12<sup>th</sup> National People's Congress

#### ■ 13<sup>th</sup> Five-Year Plan: (2016-2020)

Total railway investment: RMB3.8 trillion

High-speed railway:

Total length, 20,000 km  $\Rightarrow$  30,000 km

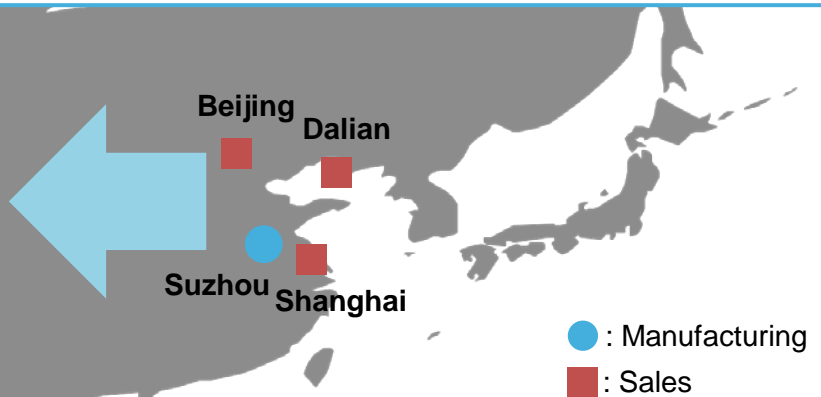


**Strengthen the solutions business**

**Increase production capacity in China**

**Launch new products**

Chinese rolling stock manufacturers



**Silicone Termination**



**Thinner High Voltage Cable**



Helps to achieve thin, lightweight products with a long life span

### ■ Strengthen the supply network for the European market



Establish new  
harness supply locations  
(1H of FY2016)

Start up location and develop  
a track record in UK IEP



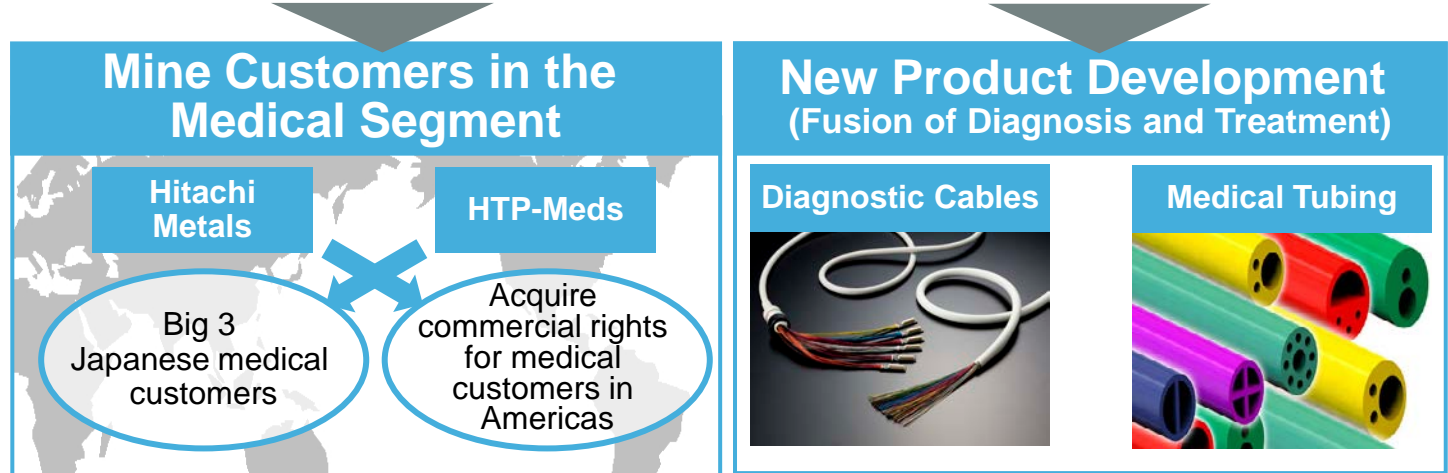
Develop leads into European  
rolling stock manufacturers

Sales goal for the rolling stock sector:  
¥9 billion (FY2015) ⇒ ¥14 billion (FY2018)

# 3-6. Medical Devices: Enter New Areas of Medical Treatment and Expand Business Domains

## ■ Generate synergies with HTP-Meds (U.S. subsidiary)

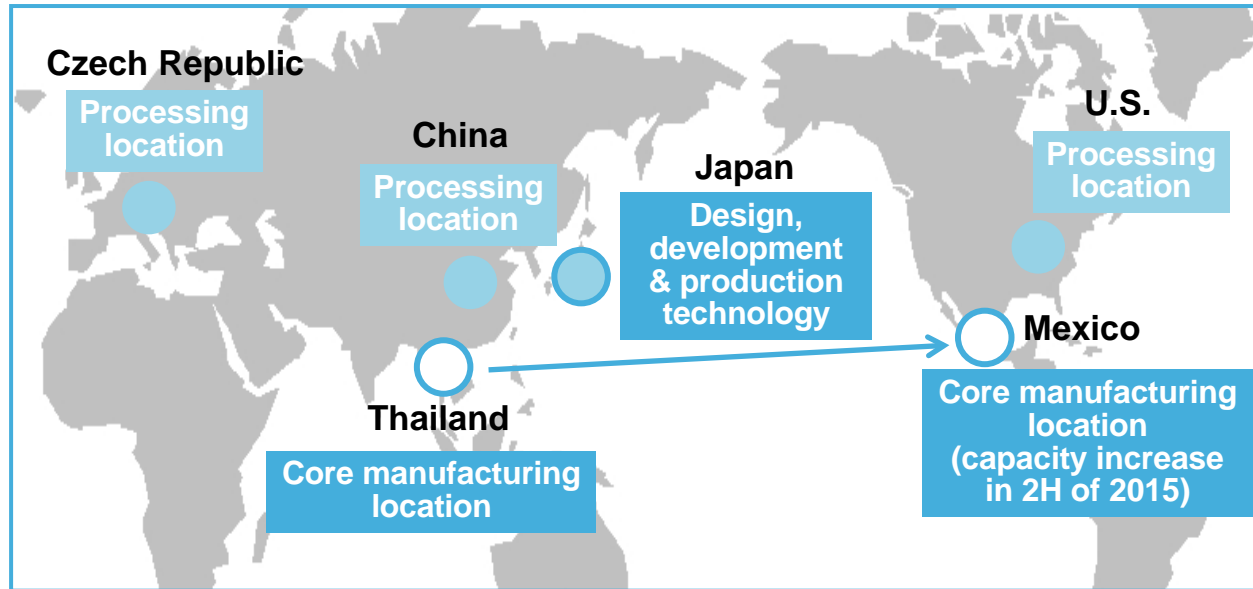
	Customer Base	Technology Base
Hitachi Metals	<ul style="list-style-type: none"> <li>Major global device manufacturer</li> <li>Japanese device manufacturer</li> </ul>	<ul style="list-style-type: none"> <li>Cabling technology and transmission technology</li> <li>Material development capabilities</li> <li>Mass production capability</li> </ul>
HTP-Meds	<ul style="list-style-type: none"> <li>Global dedicated medical manufacturer</li> <li>U.S. dedicated medical manufacturer</li> <li>Possesses certifications and approvals in medical segment</li> </ul>	<ul style="list-style-type: none"> <li>Forming and processing technology for medical tubing</li> <li>Ability to develop products rapidly</li> </ul>



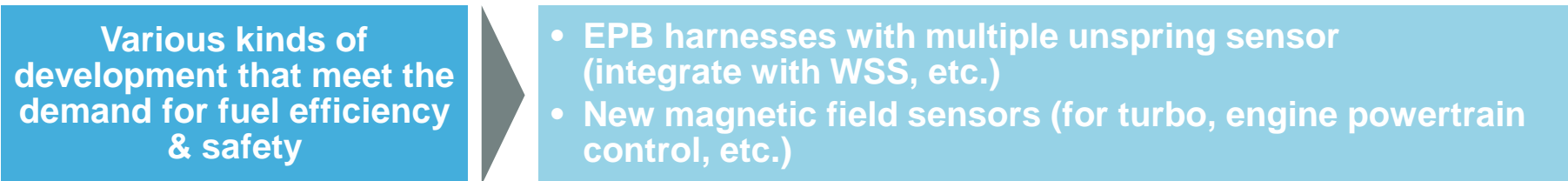
**Sales goal for the medical devices segment:  
¥7.5 billion (FY2015) ⇒ ¥11.0 billion (FY2018)**

# 3-7. Automotive Electronic Components: Strengthen Global Locations and Supply Structure

## Strengthen the supply structure in growth markets



## Expand business domains by creating new products



**Sales goal for automotive electronic components**  
¥28 billion (FY2015) ⇒ ¥34 billion (FY2018)

### ■ Investment Plan

#### Investment in growth

- Strengthen the railway segment, also keeping M&A in mind
- Increase the capacity of the manufacturing location in China in wires and cables for railway and medical uses
- Strengthen the location in Mexico in automotive electronic components

#### Strengthening the foundation

- Introduce an innovative manufacturing line for wire and cable (scheduled to come online in the 1H of FY2016)
- Introduce a new continuous casting and rolling line (scheduled to come online in April 2018)

**Capital expenditures:  
¥39 billion (cumulative total for FY2016-FY2018)**

# 3-9. Introduce an Innovative Electric Wire and Cable Manufacturing Line

## Diagram of the electric wire and cable manufacturing process

Wire drawing

Strand

Extrusion  
(insulation coating)

Cabling

Braiding

Extrusion  
(sheath coating)

Largest plant  
in China



Introduce to location in China  
(scheduled to come online  
during 1H of FY2016)

## Cross-link

Shorten lead time

Improve quality

### Applied products



Wire & cable  
for rolling stock



Industrial cable



## New Continuous Casting and Rolling Line

Improve energy efficiency and productivity

Introduce the new process

Improve product competitiveness



General-purpose wires and cables



Wires and cables for rolling stock



Medical wires and cables



Magnet wires

Achieve mass production of the new copper alloy (HiFC™)

Flexibility

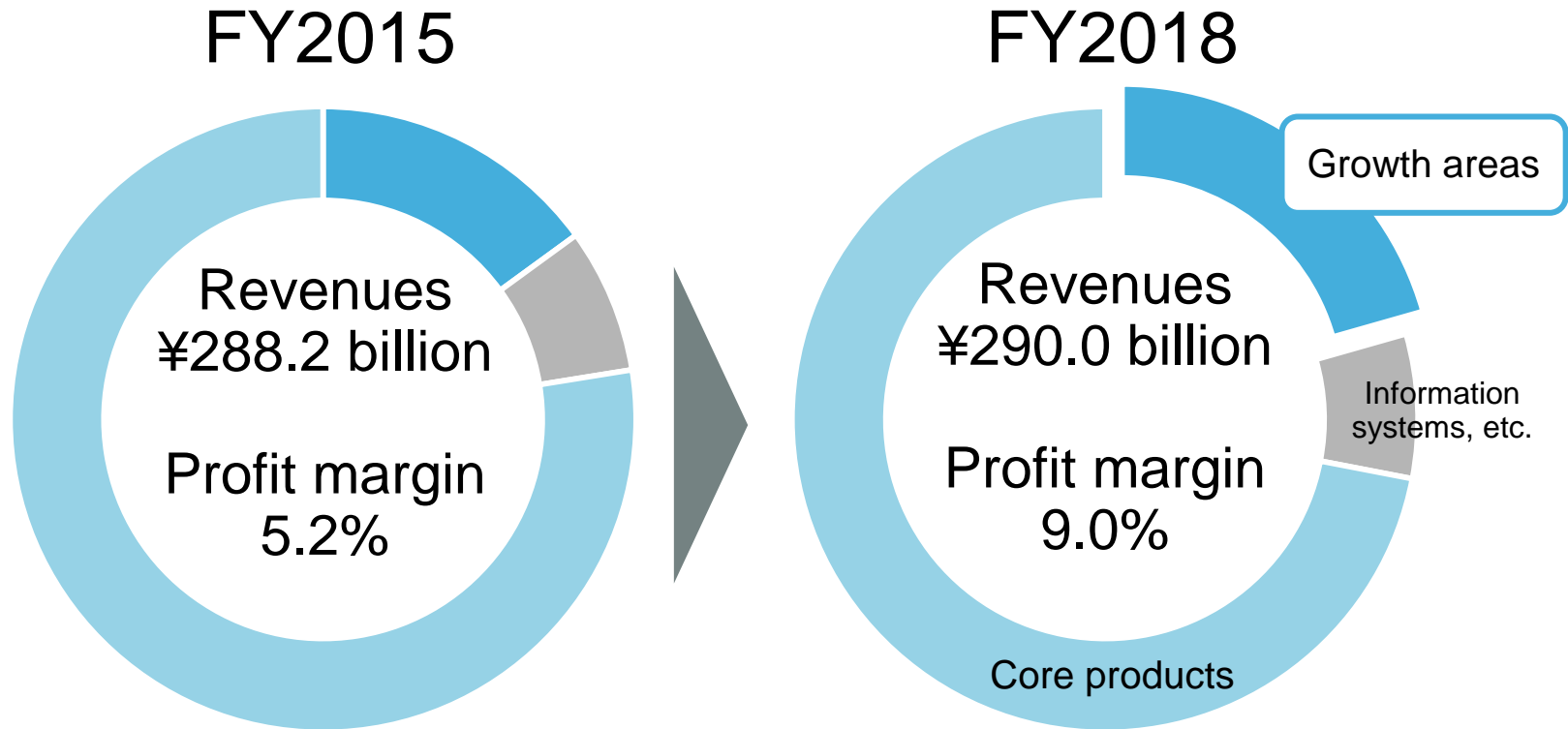
Resistance to hydrogen embrittlement

Electrical conductivity

Weldability

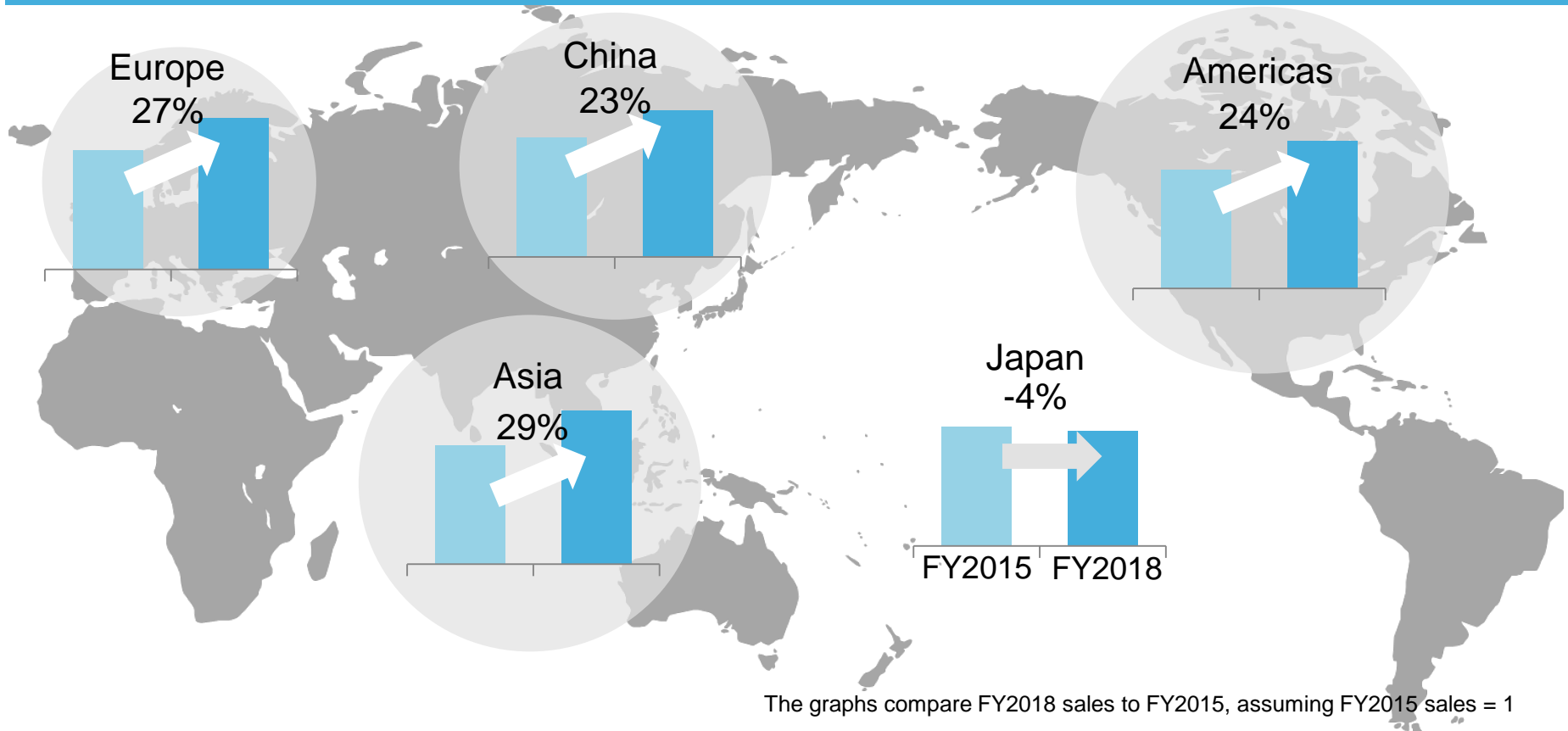
Achieve a high-profit structure and develop high value-added products

Greater expansion of business in growth areas  
and increase earning power of core products



Develop one of the most profitable businesses  
in the world in wires, cables and related products

Strive to expand in growth areas,  
concentrating on the Americas, China, and Asia



Overseas sales as a % of total sales:  
32% (FY2015) ⇒ 38% (FY2018)

FY2015 values for overseas sales as a percentage of total sales reflect the impact of business restructuring.

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### Cable Materials Company FY2018 Plan

Revenues:	¥290.0 bn
Adjusted operating income:	¥26.0 bn (9.0%)

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 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:

- 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 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 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



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