

Delivering Sustained Profitable Growth

Furukawa **G** Plan 2020 **G**roup **G**lobal **G**rowth

Forward-Looking Statement

Projections of future sales and earnings in these materials are “forward-looking statements.”

Management offers these projections in good faith and on the basis of information presently available.

Information in these statements reflects assumptions about such variables as economic trends and currency exchange rates.

Forward-looking statements incorporate known and unknown risks as well as other uncertainties that include, but are not limited to, the following items.

- Economic trends in the U.S., Europe, Japan and elsewhere in Asia, particularly with regard to consumer spending and corporate expenditures.
- Changes in exchange rates of the U.S. dollar, euro, and Asian currencies.
- The Furukawa Electric Group’s ability to respond to rapid advances in technology.
- Changes in assumptions involving financial and managerial matters and the operating environment.
- Current and future trade restrictions and related matters in foreign countries.
- Changes in the market value of securities held by the Furukawa Electric Group.

Due to the above factors, actual sales, earnings, and other operating results may differ significantly from Looking Statements in these materials. In addition, following the release of these materials, Furukawa Electric Group assumes no obligation to announce any revisions to forward-looking statement in these materials.

Copyrights

Furukawa Electric Co., Ltd. retains copyrights and other rights involving these materials. Copyright and otherwise reusing these materials in any way without prior consent is prohibited.

Furukawa Electric Co., Ltd

Taking the Group to New Heights

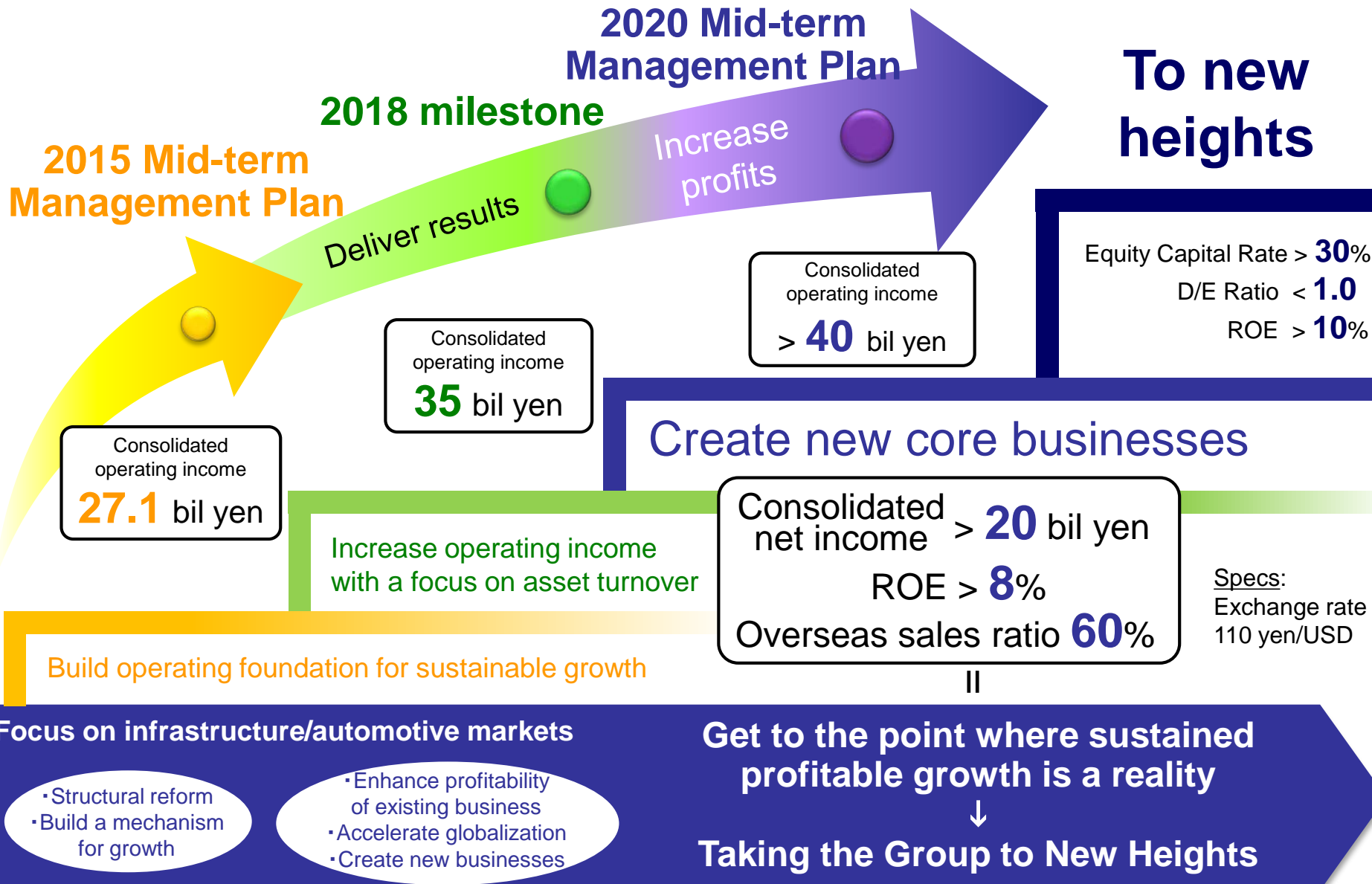


**Delivering Sustained Profitable
Growth**



*Furukawa **G** Plan 2020*
*Group **G**lobal **G**rowth*

Overview of 2020 Mid-term Plan

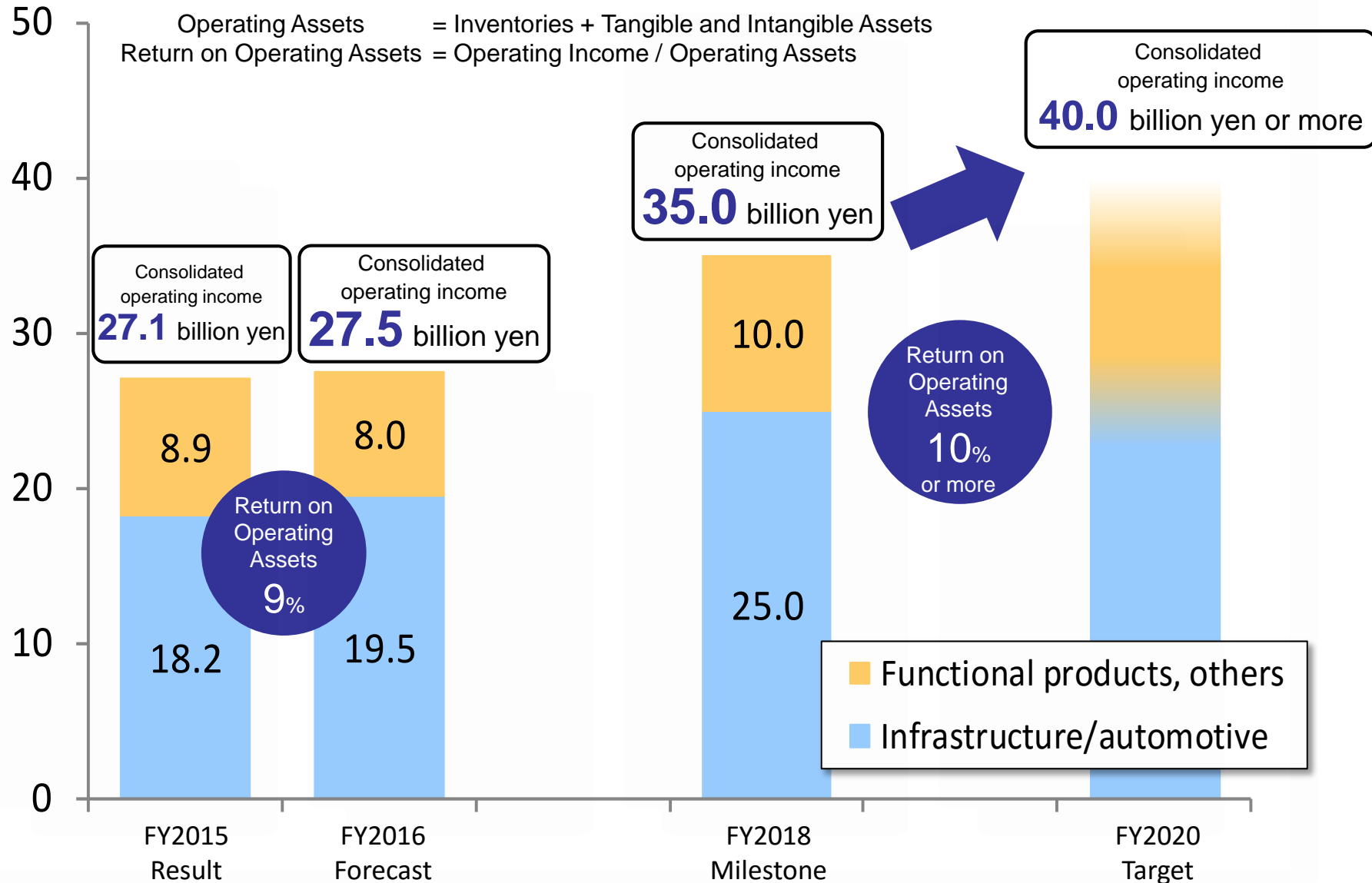


Operating Income and Asset Turnover Targets

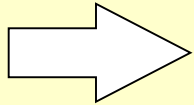
(billion yen)

Specs: Exchange rate 110 yen/USD

Operating Assets = Inventories + Tangible and Intangible Assets
 Return on Operating Assets = Operating Income / Operating Assets



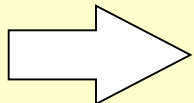
I. Focus on infrastructure/automotive business



- Now stepping up efforts to tap into the growing communications market in the West
- Beefed up overseas ultra-high-voltage power cable business
- Accelerated efforts to make cars greener

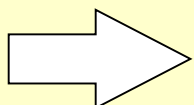
II. Build a basis for sustainable growth

- (1) Implemented structural reform
- (2) Developed new, next-generation businesses
- (3) Strengthened the Group's global management



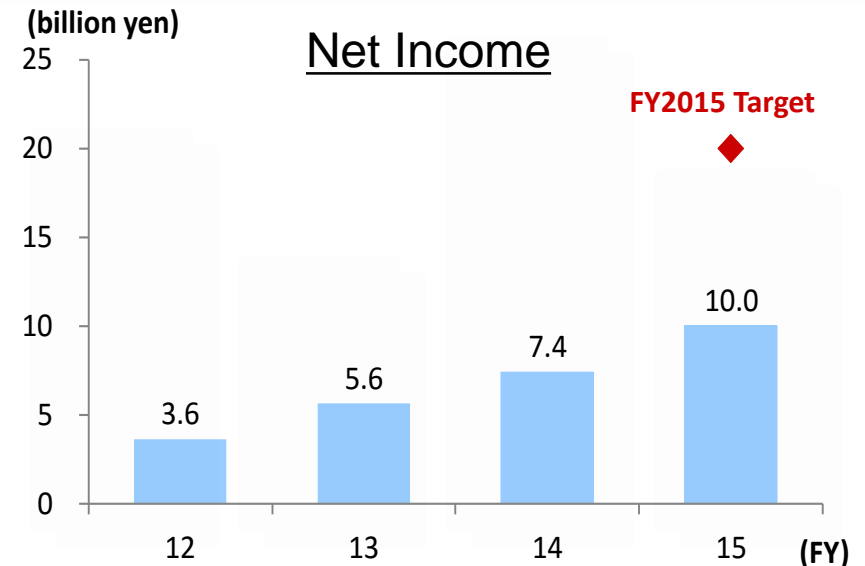
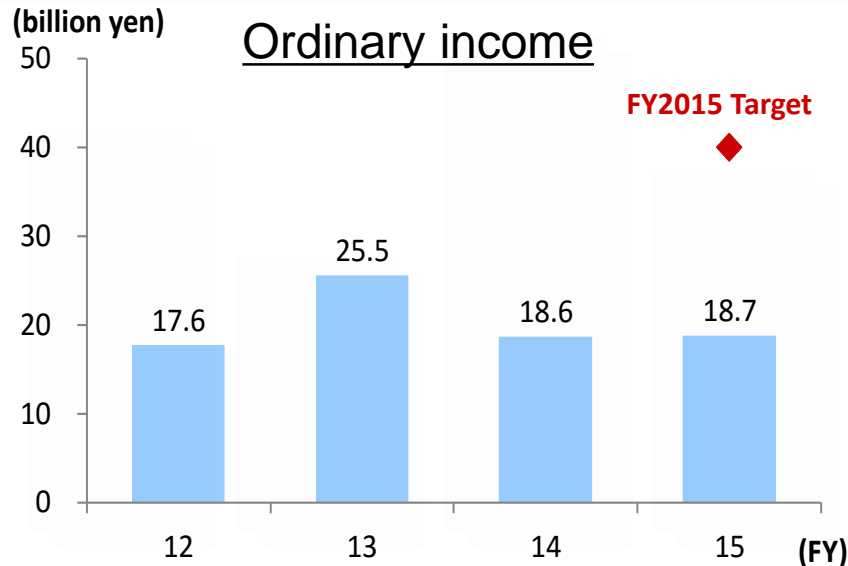
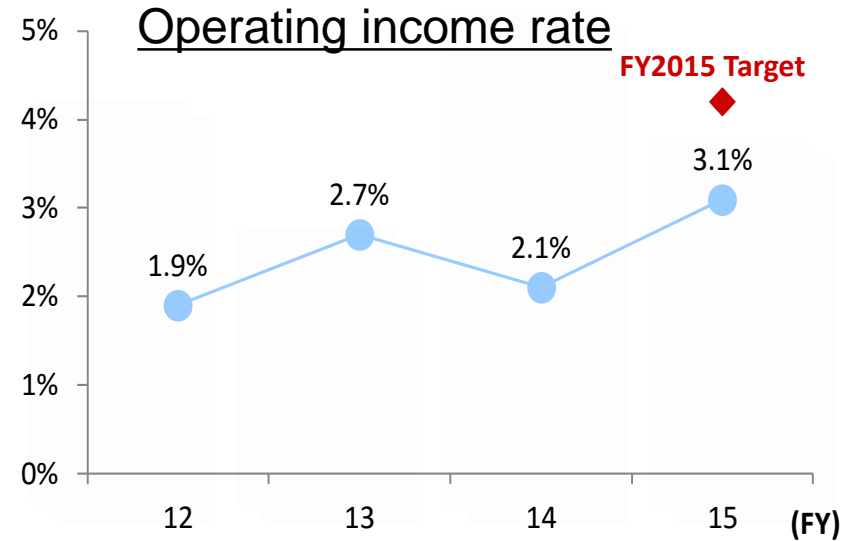
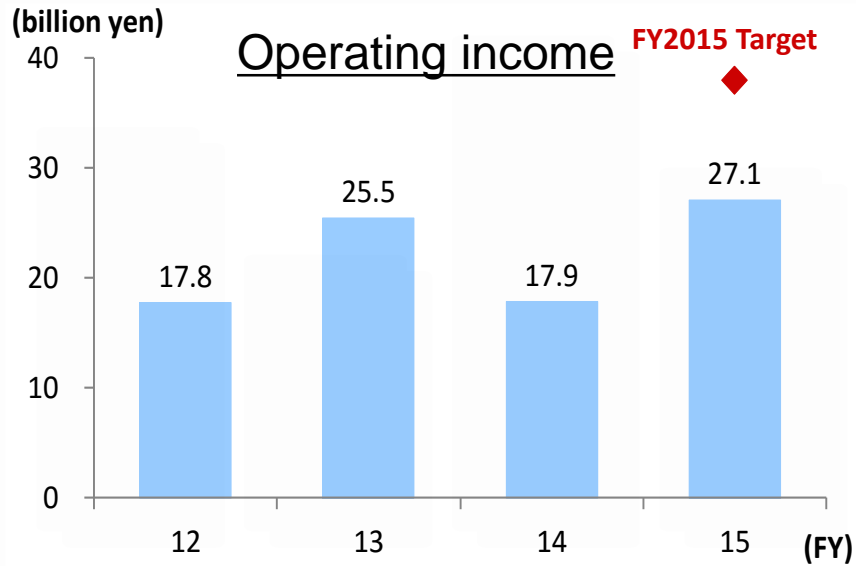
- Carried through with structural reform as planned
- Now working on commercializing fiber lasers
- SBU management system has been firmly established

III. Improve financial structure



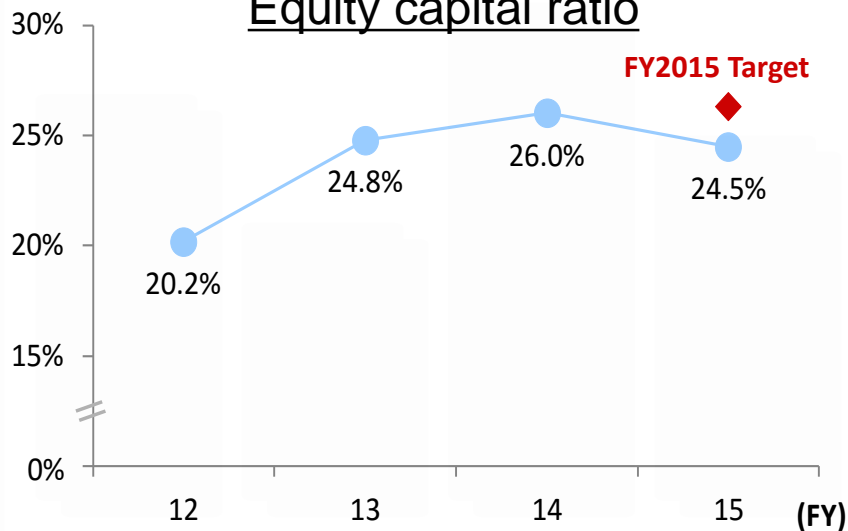
- Targets under 2015 mid-term plan not yet achieved despite improved KPIs
- Operating income targets not yet achieved either

Review of 2015 Mid-term Plan (1)

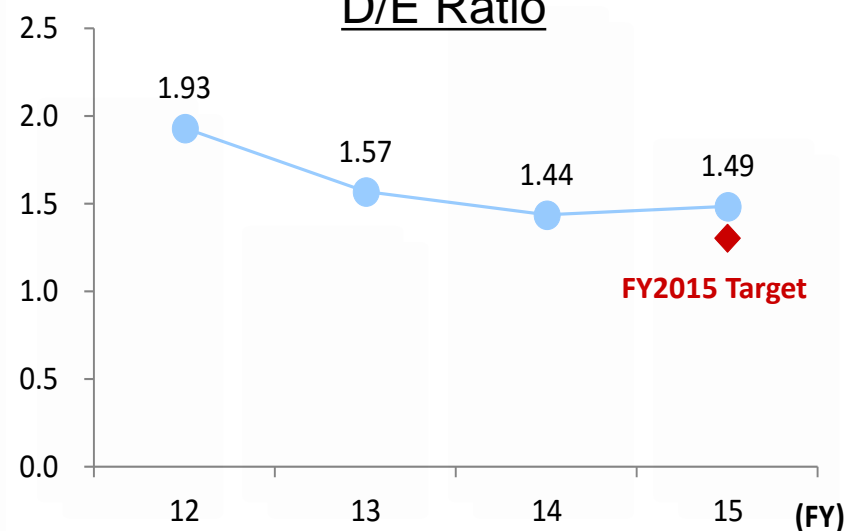


Review of 2015 Mid-term Plan (2)

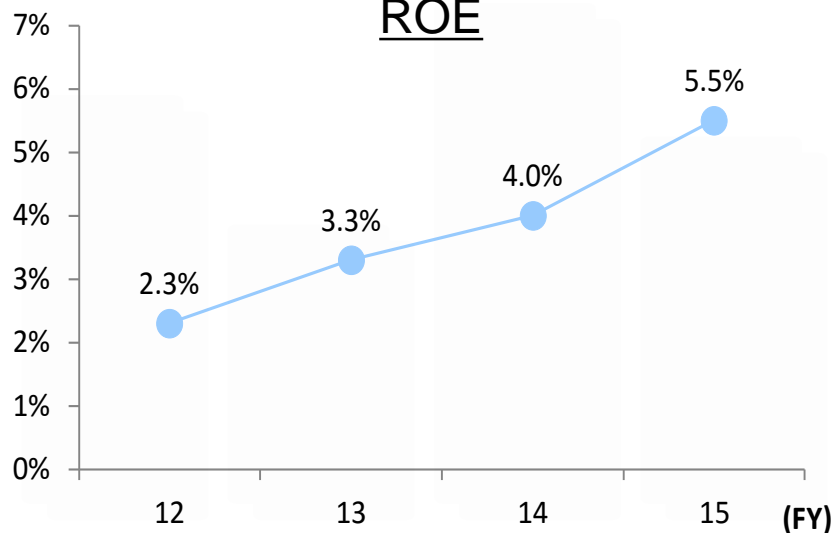
Equity capital ratio



D/E Ratio



ROE

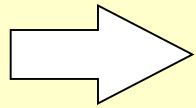


Challenge for the 2020 Mid-term Plan:

Build on 2015 mid-term plan results to create new level of profitable growth

I. Strengthen and reform businesses

Beef up key businesses/products and reform underperforming businesses/products (reform, downsize, withdraw)

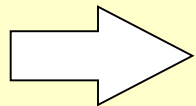


Enhance profitability of existing business

- Make each business focused on margin enhancement through innovation with customers

II. Expand sales in the global market

Leverage the Group's strengths in the global market

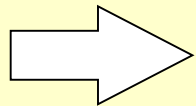


Accelerate globalization

- Implement sales expansion strategies tailored to each region's characteristics

III. Step up efforts to tap into new markets

Work on sowing seeds to that end on a medium- and long-term basis



Create new businesses

- Sustained investment bias to higher margin and higher growth rate opportunities

Develop Organizational Structure that Will Deliver Results

Restructure organization by incorporating market needs

Change reporting segments

Strengthen the Group's global management by placing affiliates under 15 SBUs

Establish divisions that oversee SBUs by market to further strengthen and reform businesses

2015 Mid-term Plan

2020 Mid-term Plan

Telecommunication

- Optical Fiber and Cable Products
- FITEL Products
- Broadband Business

Energy & Industrial Products

- Power Cable
- Industrial Cable & Power Cable Accessories
- Electric Conductor
- Functional Plastics

Metals

- Copper & High performance material Products
- Copper Tube
- Copper Foil

Electronics & Automotive Systems

- Automotive Products
- Batteries
- Magnet Wire
- Thermal Management Solution & Products
- Memory Disk

Service and Developments, etc.

Infrastructure

Communications Solutions

- Optical Fiber and Cable Products
- FITEL Products
- Broadband Business

Energy Infrastructure

- Power Cable
- Industrial Cable & Power Cable Accessories

Functional Products

- Thermal Management Solution & Products
- AT & Functional Plastics
- Memory Disk
- Copper Foil

Automotive Products & Materials

Automotive Products & Batteries

- Automotive Products
- Batteries

Electronics Component Material

- Electric Conductor
- Magnet Wire
- Copper & High Performance Material Products
- Copper Tube

Service and Developments, etc.

Consolidate sales

Build foundation for the global market

Develop into regional strategies

2015 Mid-term Plan

2020 Mid-term Plan

Sales & Marketing Division

Japan

Global Business Strategic Initiatives Division

Over-seas

Global Marketing Sales Division

Infrastructure

Strengthen

Communications Solutions

- ✓ Increase optical fiber production
- ✓ Strengthen active optical products
- ✓ Expand solutions business in Asia, Africa and LatAm
- ✓ Continue to reform domestic communications business

Energy Infrastructure

Reform

- ✓ Quickly tap into new energy demand
- ✓ Reform ultra-high-voltage power cable business
- ✓ Reform low-voltage cable business targeting construction material suppliers

Automotive Products & Materials

Strengthen

Automotive products and batteries

- ✓ Increase the ratio of aluminum and functional products
- ✓ Expand battery sales (for industrial/automotive applications)
- ✓ Promote integration with telecommunications and wireless technologies

Electronics Component Material

Reform

- ✓ Expand sales of products using oxygen-free copper
- ✓ Boost high-performance magnet wire
(automotive rectangular wire and ribbon wire)
- ✓ **Downsize underperforming product lines**
(shift to high-value-added products)

Functional Products / Service and Developments, etc.

Strengthen

- ✓ Strengthen tapes for semiconductor processing
- ✓ Strengthen thermal management solutions
(heat pipes, heat sinks)
- ✓ Strengthen copper foil for batteries and high-
performance copper foil
- ✓ Accelerate launch of fiber laser business

Restructuring of power cable business

- Power (energy) infrastructure market to grow on a medium- and long-term basis
- Make the power cable business more competitive
 - World-class technological capability
 - Wealth of experience gained in the field
- Strengthen and develop the power cable business to be taken over from Viscas

Major
outcomes

- **Boost sales capability**
- **Enhance engineering capability**
- **Beef up manufacturing capability**



Transform into sustainable, profitable businesses and take them to new heights

II. Expand Sales in Global Market: Regional Strategies

Worldwide

- Enhance optical fiber supply capability
- Strengthen active optical products
- Strengthen/expand sales of automotive functional parts

North America

- Increase production/expand sales of optical fiber cables, optical components, etc.

China, South Korea, Taiwan

- Expand power cable and “out-out” business from China
- Expand sales of copper foil for batteries

Japan

- Quickly tap into new energy demand
- Strengthen high-performance copper foil
- Expand fiber laser business
- Boost high-performance magnet wire

South and Central America

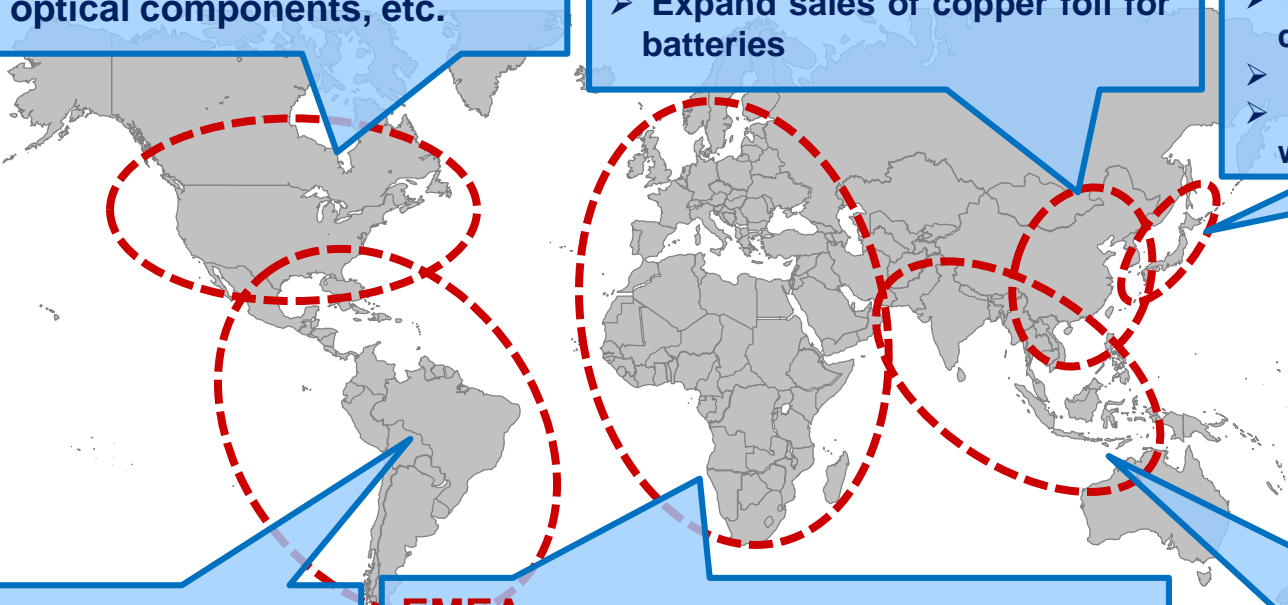
- Expand communications solutions business

EMEA

- Launch optical cable production site (Africa)
- Expand sales of functional plastics (for railroad/automotive markets)
- Get more power cable orders (Middle East)

Southeast Asia, India

- Expand communications solutions business
- Get more power cable orders



III. Step Up Efforts to Tap into New Markets: Infrastructure/Automotive

Furukawa G Plan 2020

- Rectangular magnet wire and high-voltage products for HV/EV
- Heat sinks for automotive application
- Copper foil for vehicle-mounted LiBs
- LED lighting Reflectors /MCPET

- Battery monitor sensors
- Ultra Batteries



- Container type/ V2B power storage systems



- Aluminum wire harness
- α Terminal for AI wire harness
- Foamed plastic air ducts
- Highly rigid plastic materials



- Automotive radars
- Wireless communication-related products

Vehicles as ICT terminals / Self-driving cars

Energy solutions

IoT Big data

- Riser cables for offshore floating wind farm

- Optical multi-hop communications systems

Nanotechnology

Numerical simulation technology

Thermal management technology

Alloy engineering technology

Electrification / Energy saving

One F

Wireless technology

Optical/communications technology

- Optical engines for optical interconnection

- HDD aluminum substrates and Heat sinks for data centers
- Copper foil for high-frequency applications

Polymer processing technology

Semiconductor laser technology

Smart infrastructure

High speed/ Large capacity

- Fusion splicers
- Optical connectors

Furukawa G Plan 2015

“Greener” cars

Diversification of energy infrastructure

Smarter communications infrastructure

- Ultra-high Fiber count cables
- Ultra-low loss optical fiber
- Low bend loss fiber



- LAN/FTTH solutions
- Narrow line width ITLA/μITLA

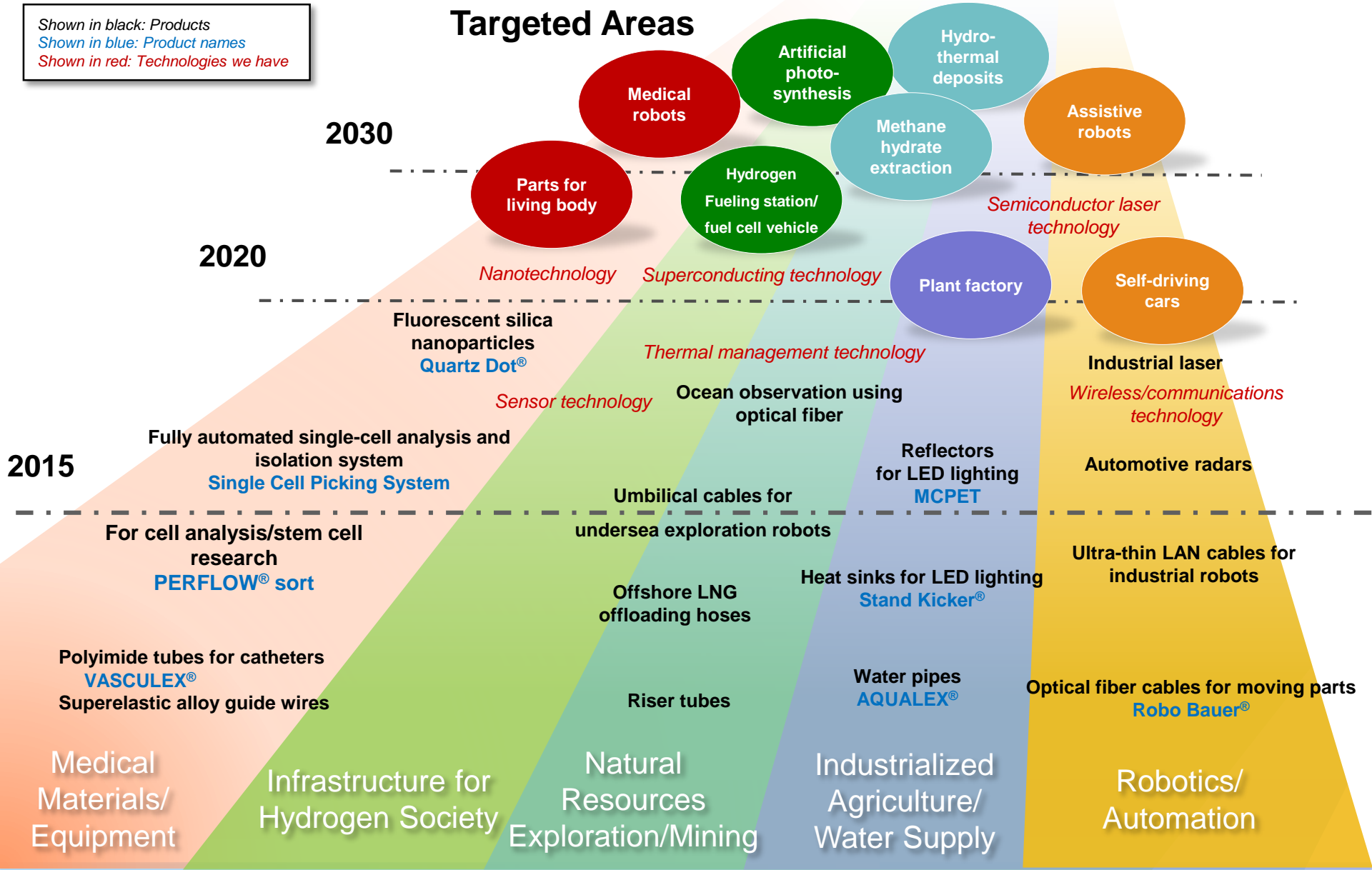


Shown in black: Products
Shown in red: Technologies we have

III. Step Up Efforts to Tap into New Markets: Targeted Areas

Shown in black: Products
 Shown in blue: Product names
 Shown in red: Technologies we have

Targeted Areas



- Allocate management resources with a focus on **increasing profits** in the “focus business areas (infrastructure/automotive markets)” that support the Group’s sustainable growth, and **creating new businesses**.
- This will enhance the Group's profitability and **improve its financial structure**.



We will maintain a stable dividend policy while keeping a good balance between growth investment and financial structure.

Corporate Governance

- Evaluate the effectiveness of the Board of Directors to make continuous improvements in Board operations, etc.
- Carry out governance while maintaining a good balance between "offensive" and "defensive" management
- Make directors' remunerations more performance-based and add medium- to long-term incentives

Group Philosophy Dissemination

- Hire/train employees who act in accordance with the Group's common values so we can live up to expectations of our communities/customers and earn their trust while helping to build a sustainable society

Work Style Reform

- Reform work style/organizational culture with an aim to achieving sustainable growth of the company and enabling individual employees to live their lives to the fullest.

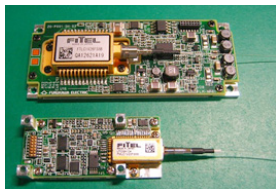
Diversity Promotion

- Respect individual diversity in people, work styles, and values, so that each individual can play an active role in growing the company (starting from women's empowerment)

e: Friendly

**Optical fiber
Optical fiber cables**

**Active optical products
(ITLA/micro ITLA)**



e: Friendly

**Cable trough made
from recycled plastics,
Green Trough**



**MgBOX,
magnesium air battery
made with a paper
container**



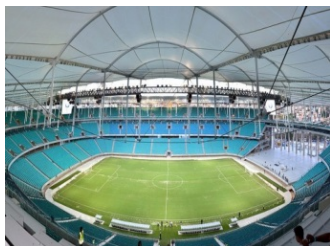
**Renewable energy
(hydropower generation)**



ENP Furukawa Electric Group
Furukawa Nikko Power Generation Inc.

Our infrastructure business that protects the environment and sustains lives across the globe is helping to pave the way to a sustainable society.

Communications Solutions Business



**Used in 10 of the 12 Brazil
World Cup stadiums**

e: Friendly

**Wire harness using
aluminum power cable**



**Lead battery
monitor sensor**



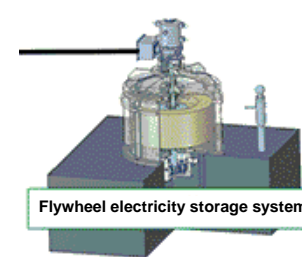
Smart Infrastructure

Riser cable



**Fukushima offshore
wind farm project**

Superconducting magnet



Appendix

Comparison with Past Mid-term Plans

2006–09

Innovation 09

Automotive/electronic parts
Photonics
NW environment

Development of products with top market share and global management

31%: Actual

2010–12

New Frontier 2012

Growth in new markets/businesses

Globally expand Transmission Infrastructure business
Drive progress in Functional Material business
Rebuild conventional businesses

37%: Actual

2013–15

Furukawa G Plan 2015

Infrastructure/automotive

Implement structural reform
Develop new, next-generation businesses
Strengthen the Group's global management

Goal 50%
46%: Actual

2016–20

Furukawa G Plan 2020

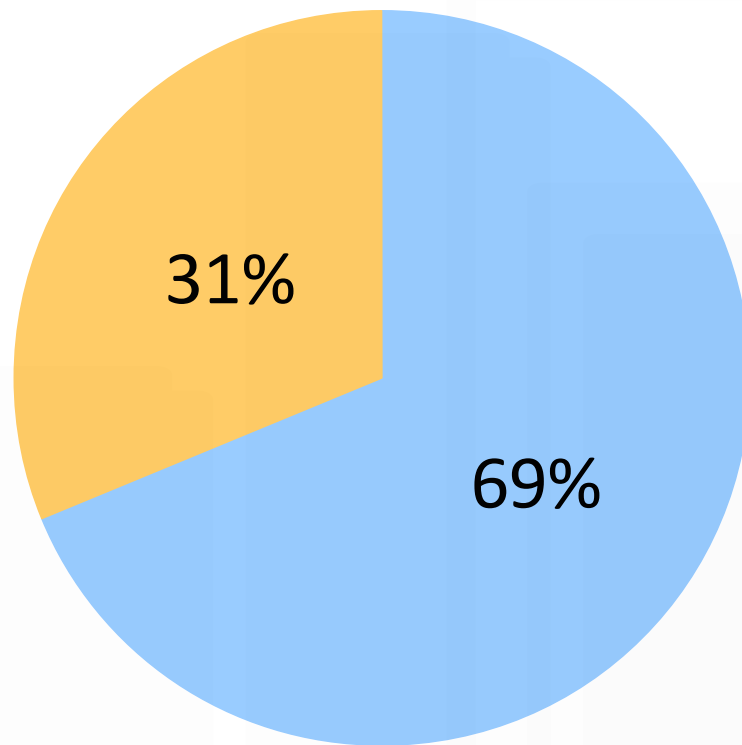
Infrastructure/automotive

Enhance profitability of existing business
Accelerate globalization
Create new businesses

Goal 60%

Capital Investment

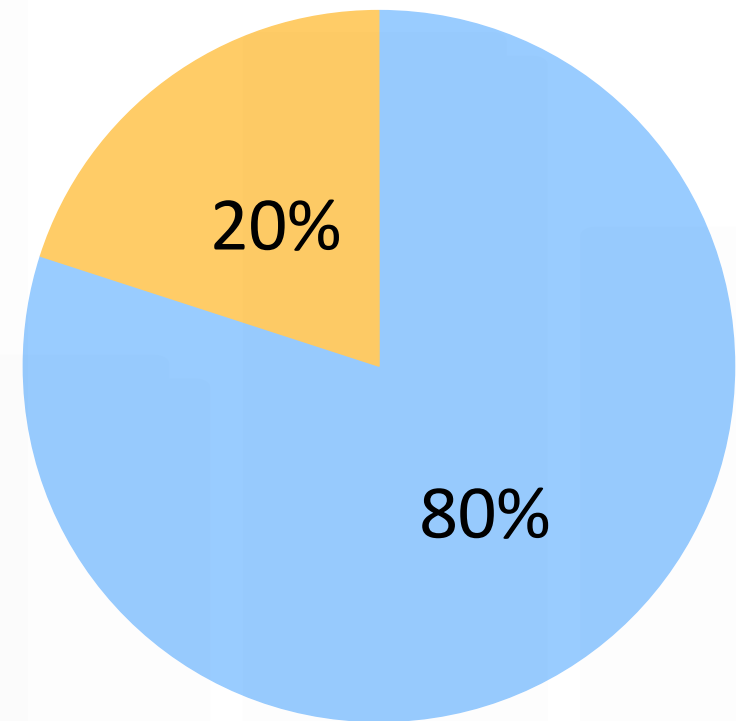
FY2016–18 **110** billion yen
(FY2013–15 93 billion yen)



■ Functional products, others
■ Infrastructure/Automotive

R&D Investment

FY2016–18 **57** billion yen
(FY2013–15 51 billion yen)

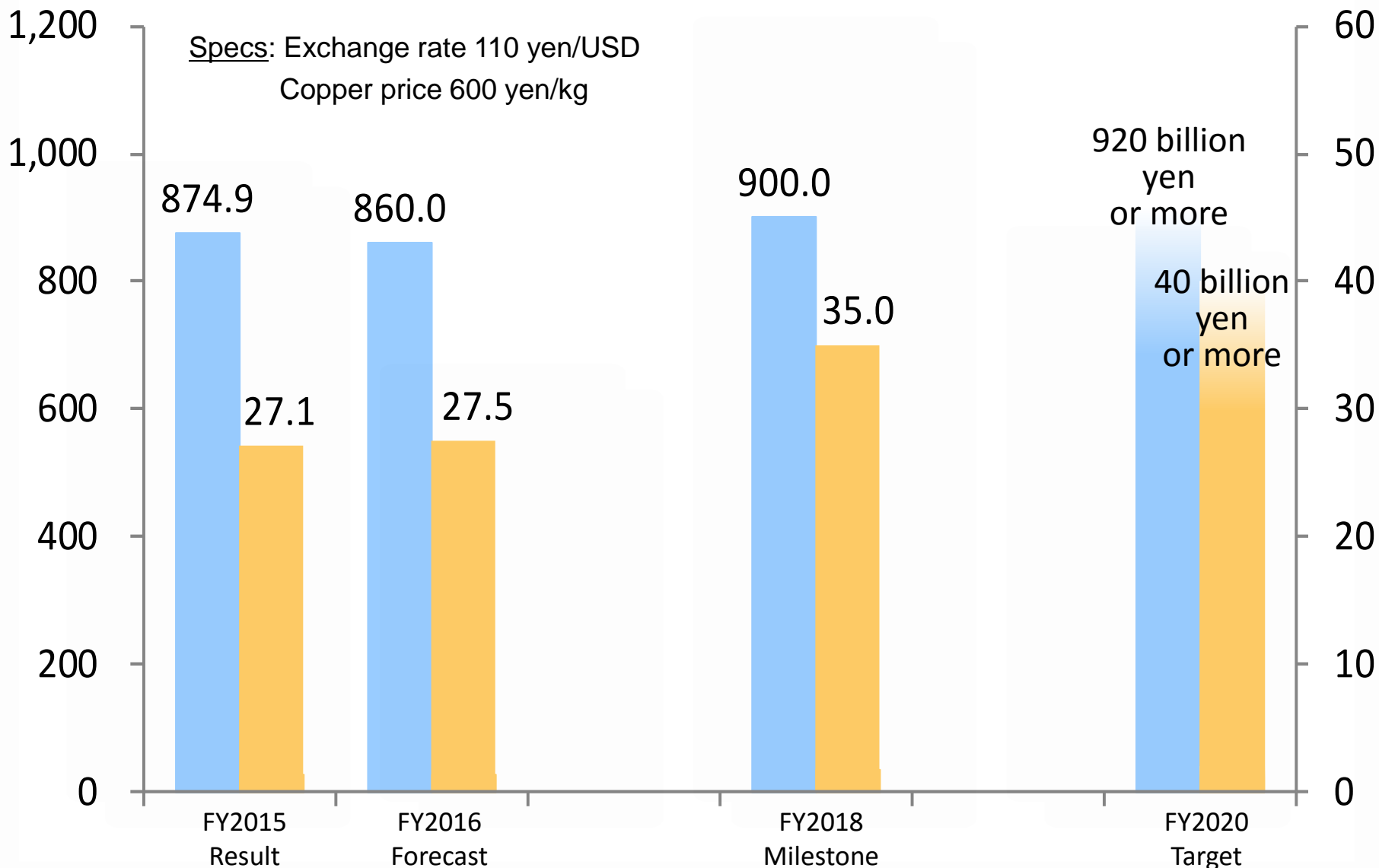


■ Functional products, others
■ Infrastructure/Automotive

Net Sales and Operating Income

Net sales (billion yen)

Operating income (billion yen)



Bound to  *Innovate*