

Furukawa Electric Group  
Medium-term Management Plan 2022~2025  
(2025 Mid-term Plan)

***Road to Vision 2030***  
***-Transform and Challenge-***

President & CEO Keiichi Kobayashi

May 26, 2022

Furukawa Electric Co., Ltd.

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**FURUKAWA ELECTRIC CO., LTD.**

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- 1. Vision 2030 and positioning of 2025 Mid-term Plan**
- 2. Create and strengthen businesses designed to solve social issues**
  - (1) Maximize profits in existing businesses through a focus on capital efficiency directed at 2025**
  - (2) Build a foundation for creating new businesses by 2030**
- 3. Numerical management targets and allocation of management resources**
- 4. Strengthen the foundation for ESG management**

# Contents of today's presentation

- 1. Vision 2030 and positioning of 2025 Mid-term Plan**
2. Create and strengthen businesses designed to solve social issues
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3. Numerical management targets and allocation of management resources
4. Strengthen the foundation for ESG management

# 1. Vision 2030 and positioning of 2025 Mid-term Plan

## Value creation process directed at achieving Vision 2030

### Furukawa Electric Group Corporate Philosophy

Today

Forward-looking

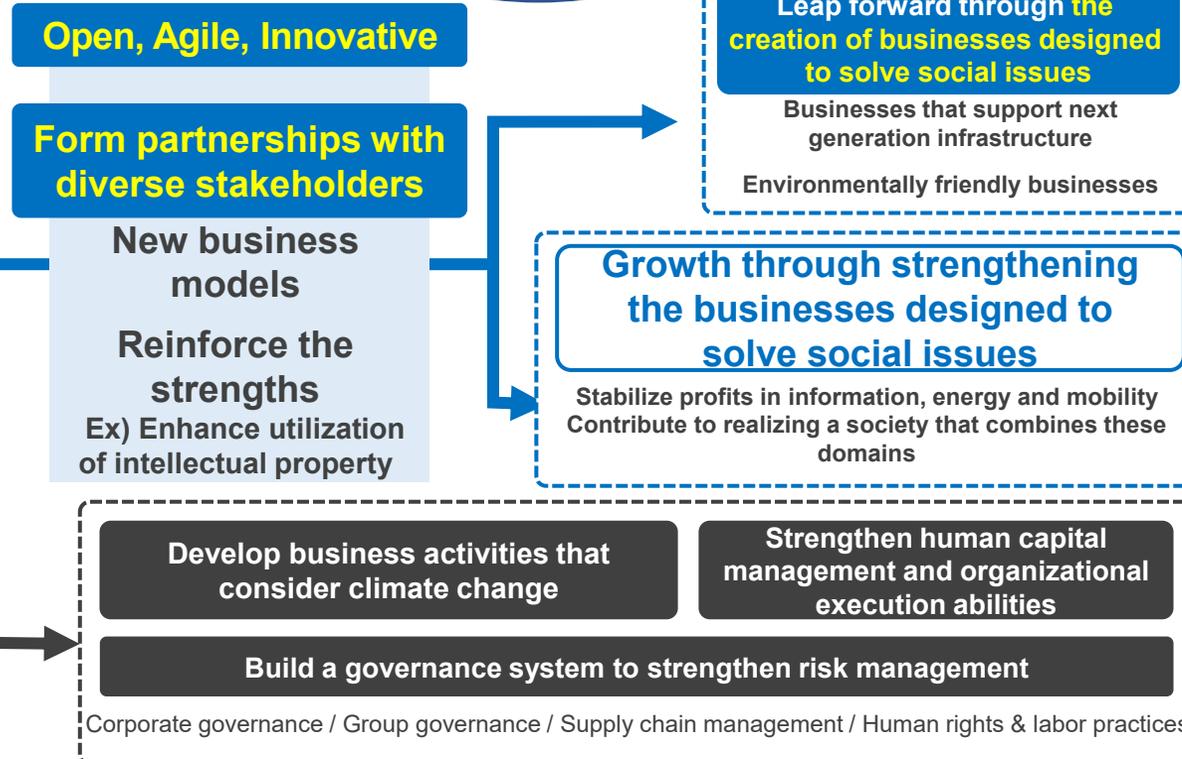


Backcasting

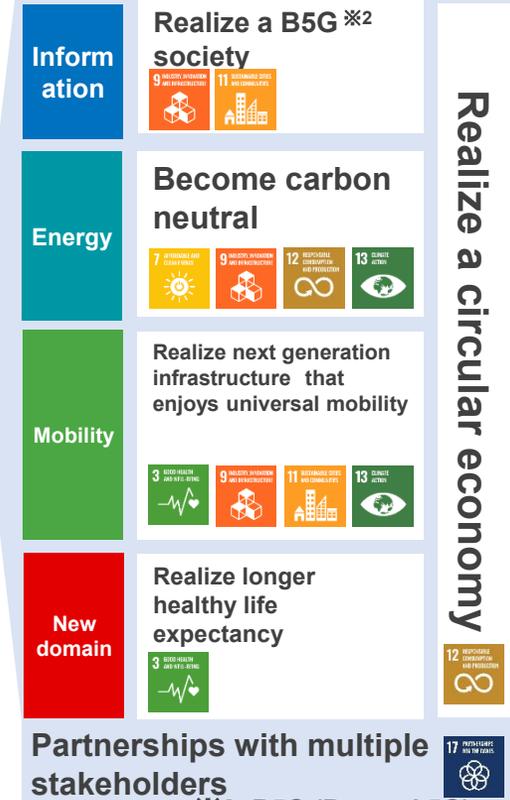
2030



Furukawa Electric Group Vision 2030



### Social issues



\*1: 4 core technologies: metals, polymers, photonics, high frequency

\*2: B5G (Beyond 5G)

# 1. Vision 2030 and positioning of 2025 Mid-term Plan

## Positioning of 2025 Mid-term Plan

Forward-looking

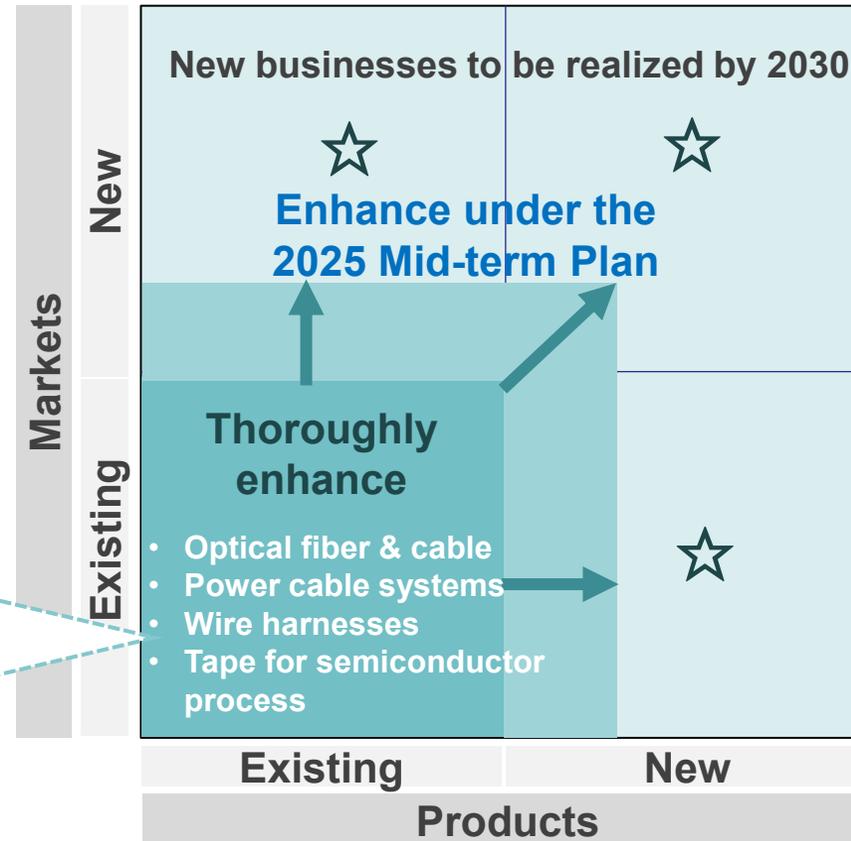
Maximize profits in existing businesses through a focus on capital efficiency directed at 2025

Build a foundation for creating new businesses by 2030

Backcasting

2030

☆ Prepare to address in order to further shine



Furukawa Electric Group Vision 2030

# 1. Vision 2030 and positioning of 2025 Mid-term Plan

## Medium-term changes in the external environment

The external environment is rapidly changing on many fronts, and although there is increasing risk that responding incorrectly may be fatal, the range of social issues Furukawa Electric can contribute to is growing

### Politics

- ▶ **Increased awareness of ESG/SDGs as a core pillar of corporate management**  
Accelerated initiatives for realizing a carbon neutral society
- ▶ **Globally increased political divisions**  
Further confrontation between nations will have a major impact on global affairs

### Society

- ▶ **New lifestyles**  
Prolonged responses to COVID-19, work style reforms, 100 year life expectancy
- ▶ **More frequent natural disasters and increased damage**  
More severe natural disasters, and increased demand for renewing social capital
- ▶ **Changing concept of “mobility”**  
Evolution of digital technology, and changing concept of mobility for people, goods and information

### Economy

- ▶ **Shrinking markets in Japan**  
Zero growth and shrinking labor market due to the aging and declining population
- ▶ **Growth in emerging markets such as Asia**  
Emerging countries will continue rapid growth, and some countries will face fiscal weakness
- ▶ **Unwinding of extremely loose monetary policies**  
Reversal of monetary policies in response to inflation, and rising interest rates

### Technology

- ▶ **Rapid advances in DX**  
Level of engagement in DX will influence the competitive position of companies
- ▶ **Widespread implementation of 5G, and advances in CASE based on that foundation**  
Ultra-high speed telecommunications, multiple simultaneous connections and ultra-low latency  
Increased demand for electric power, and expansion of operations beyond traditional industry borders

### Social issues

Realize a B5G society

Become carbon neutral

Realize next Generation Infrastructure that enjoys universal mobility

Realize Longer healthy life expectancy

Realize a circular economy

# 1. Vision 2030 and positioning of 2025 Mid-term Plan

## Vision 2030 (Each business domain)

### Create new value with customers as partners, and solve social issues

~ Furukawa Electric Group's technology, products and services will "support" and be "utilized by" society ~



### Vision for 2030 in each business domain

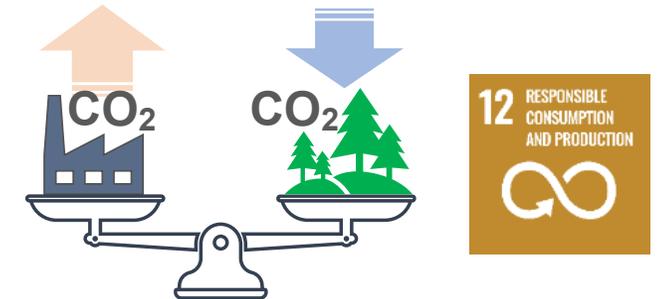
<b>Information</b>	Increased data traffic following realization of a B5G society ⇔ Support through photonics technology and build social infrastructure	<ul style="list-style-type: none"> <li>Revolutionary optical fiber</li> <li>Fusion of photonics &amp; electronics, quantum repeater</li> <li>V2X, 5G-AP</li> <li>Data center cooling systems</li> <li>Energy lasers</li> </ul>
<b>Energy</b>	Become carbon neutral in 2050 ⇔ Through our extensive experience and technological capability, make a tougher infrastructure and realize a recycling-based society	<ul style="list-style-type: none"> <li>Extra-high voltage power cable</li> <li>DC power cable</li> <li>Bipolar storage batteries</li> <li>DC microgrids</li> <li>Superconductors</li> </ul>
<b>Mobility</b>	Advances in xEV, CASE and MaaS ⇔ Realize safe, secure mobility through the provision of components, systems and applications	<ul style="list-style-type: none"> <li>Lightweight aluminum</li> <li>Peripheral monitoring radar</li> <li>In-vehicle &amp; infrastructure communications devices</li> <li>Intelligent walkways</li> </ul>
<b>New domain</b>	Social requirements for safety and security ⇔ Provide devices and services for life sciences and maintaining social infrastructure	<ul style="list-style-type: none"> <li>Tellumino™</li> <li>Non-invasive blood sugar measurement device</li> <li>Michi-ten</li> <li>Hall thruster power supply</li> </ul>

# 1. Vision 2030 and positioning of 2025 Mid-term Plan Vision 2030 (Realize a circular economy)

Contribute to realizing a circular economy by continuing to invest management resources in creating new value

Become carbon neutral throughout the supply chain

Realize a circular economy in concert with others



3 principles of a circular economy

1. Designed to not generate waste materials or pollution
2. Can continue using the products and materials
3. Restores the natural systems



Collaboration in concert with partners through sympathy with the ecosystem



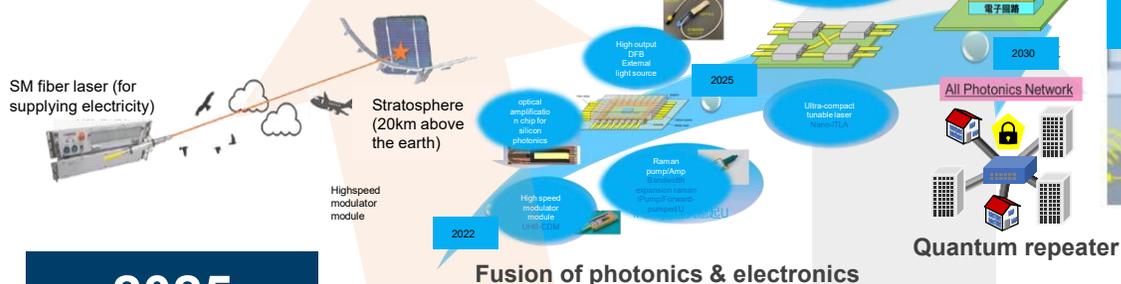
# 1. Vision 2030 and positioning of 2025 Mid-term Plan Telecommunications: Realize a B5G society

Vision 2030

Increased data traffic following realization of a B5G society  
 ⇔ Support through photonics technology and build social infrastructure

Leap forward through the creation of businesses designed to solve social issues

Communications + expansion into non-communication fields



Data center cooling systems



Realize a B5G society

2025 Goal

Realize growth by strengthening the businesses designed to solve social issues

Expansion of networking systems (solutions)

Optical fiber  
Ultra-high count, multi-core  
Rollable Ribbon cable



Optical semiconductor chips for telecommunications



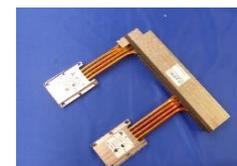
ITLA  
(Semiconductor laser for optical communication)

Next generation PON technology  
Virtual router



PON / router

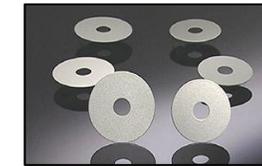
Data center cooling solutions  
Support the growing semiconductor demand



Heat sink for data center



Tape for semiconductor process



Aluminum blanks (for HDD)

Today

Business developments leveraging metals, polymers, photonics and high frequency (wireless)

# 1. Vision 2030 and positioning of 2025 Mid-term Plan Energy: Carbon neutral

Become carbon neutral in 2050

⇔ Through our extensive experience and technological capability, make a tougher infrastructure and realize a recycling-based society

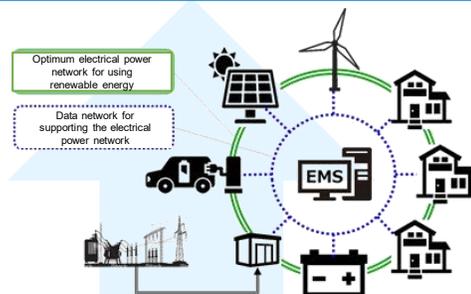
Vision 2030

Leap forward through the creation of businesses designed to solve social issues

## Recycle greenhouse gases



Generate green LP gas using original catalyst technology (metal encapsulated zeolite)



Microgrids



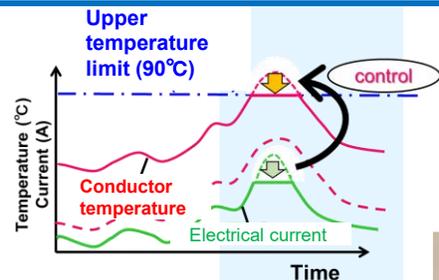
High temperature superconducting materials for nuclear fusion



Realize carbon neutral

2025 Goal

Realize growth by strengthening the businesses designed to solve social issues



Dynamic rating



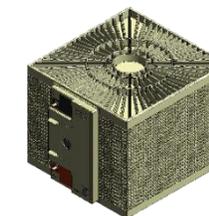
Power cable for offshore wind power



Extra-high voltage power cable



Renewable energy Lead-acid battery for cycle-use



Bipolar lead storage batteries

Today

In the field of renewable energy, strengthen the MONOZUKURI capabilities with a focus on “connection technology”

# 1. Vision 2030 and positioning of 2025 Mid-term Plan

## Mobility: Enjoy universal mobility

Advances in xEV, CASE and MaaS

⇔ Realize safe, secure mobility through the provision of components, systems and applications

**Leap forward through the creation of businesses designed to solve social issues**

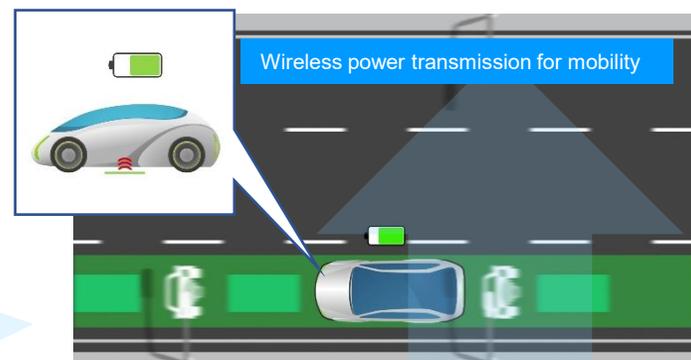
**Vision 2030**

V2X telecommunications

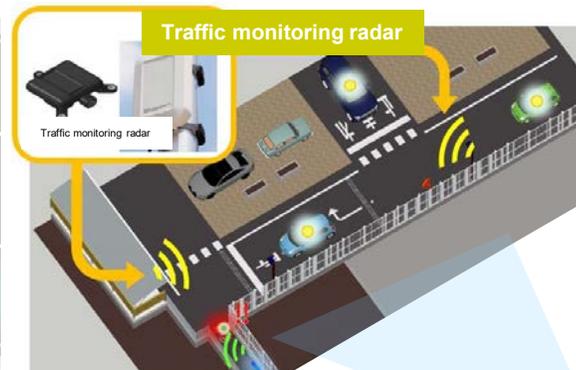
Disaster prevention & mitigation



Support for safety and autonomous driving



Wireless power transmission



Next generation urban planning



Realize next generation infrastructure that enjoys universal mobility

**2025 Goal**

**Realize growth by strengthening the businesses designed to solve social issues**

**Today**



Aluminum wire harness



Peripheral monitoring radar



SRC



BSS®



High voltage components



Wireless power transmission



Intelligent pedestrian walkway

High performance troughs

**Mainly supply wire harnesses and components to four-wheel vehicle manufacturers**

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2. Create and strengthen businesses designed to solve social issues

(1) Maximize profits in existing businesses through a focus on capital efficiency directed at 2025

	<b>Approach to solving the issues</b>	<b>Main products and services</b>
<b>Communications Solutions</b>	<ul style="list-style-type: none"> <li>• High value added optical fiber and cable</li> <li>• Build optical network infrastructure and provide robust solutions</li> <li>• High output, high efficiency, concentrated light sources</li> </ul>	<ul style="list-style-type: none"> <li>• RR cable ·Submarine / specialty fibers ·Fusion splicer</li> <li>• Networking system (solutions business)</li> <li>• Semiconductor lasers for optical communication</li> <li>• High output fiber lasers for industrial use</li> </ul>
<b>Energy Infrastructure</b>	<ul style="list-style-type: none"> <li>• Power cable systems for renewable energy</li> <li>• Develop next generation infrastructure for the aging society</li> <li>• Build a tough social infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>• Submarine and underground power cable for renewable energy</li> <li>• Extra-high voltage underground power cable (reduce project time and manpower)</li> <li>• Aluminum conductor CV cable ·Plug-in connectors</li> </ul>
<b>Automotive Products &amp; Batteries</b>	<ul style="list-style-type: none"> <li>• Environmentally friendly products for vehicle electrification, lighter weight and energy management</li> <li>• Advances in danger detection</li> </ul>	<ul style="list-style-type: none"> <li>• Aluminum wire harnesses ·BSS®</li> <li>• High voltage harnesses and wiring components</li> <li>• Lead-acid batteries</li> <li>• SRC ·Peripheral monitoring radar</li> </ul>
<b>Electronics Component Materials</b>	<ul style="list-style-type: none"> <li>• Products with excellent thermal properties, and products that decrease vehicle weight and increase fuel efficiency</li> <li>• Materials for supporting electric vehicles, ADAS equipped vehicles and next generation telecommunications networks</li> </ul>	<ul style="list-style-type: none"> <li>• Copper alloy strips for connectors</li> <li>• Aluminum alloy wire for harnesses</li> <li>• Bondable wire for in-vehicle ECUs</li> <li>• Thin diameter magnet wire for inductors used in telecommunications infrastructure</li> </ul>
<b>Functional Products</b>	<ul style="list-style-type: none"> <li>• Products for building high speed, high capacity, low latency telecommunications networks</li> <li>• Products that contribute to efficient energy use</li> </ul>	<ul style="list-style-type: none"> <li>• Tape for semiconductor process</li> <li>• Heat dissipation / cooling products</li> <li>• Aluminum blanks for HDD</li> <li>• Electrolytic copper foil for printed wiring boards / batteries</li> </ul>

2. Create and strengthen businesses designed to solve social issues

(1) Maximize profits in existing businesses through a focus on capital efficiency directed at 2025

**【Optical fiber and cable】**

**Increase sales of high value added products and accelerate the expansion of the networking systems business**



Realize a B5G society

**Business environment**

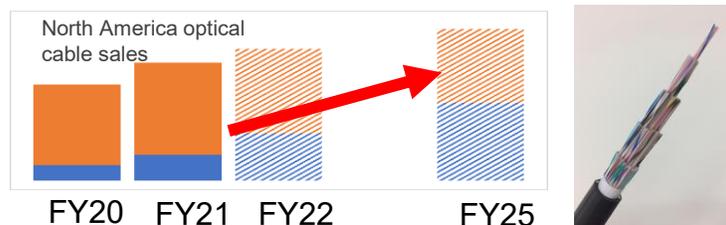
- ❑ **Medium to long-term growth of optical fiber demand**
  - CAGR + 5% (Estimate by Furukawa Electric)
  - Continued global expansion of FTTH/5G
  - Continued infrastructure investment in North America
  - Improved supply/demand balance
  
- ❑ **Diversifying customer requirements**
  - Low cost, energy saving
  - Multi-core, high fiber count
  - Easy installation and design flexibility
  - Short delivery lead times, improved customer service
  
- **Low unemployment rate and rising wages (North America)**

**Business strategy**

Growth markets and strengths of the products / technology

⇒ **Increase sales of high value added products**

Triple sales of rollable ribbon cable



Strengths of the business model developed in Central & South America

⇒ **Expand the networking systems business**

Focus on America, Europe and Asia, and increase sales by 30%



**Initiatives for realizing the strategy**

**Continue to increase productivity and reduce costs**

Respond to growing demand in North America and Europe markets

**Increase sales of specialty fibers**

Enhance R&D and partnerships

- For submarine cable
- Non-telecommunications fields (Energy transmission, sensing, aerospace and medical)

**Strengthen cooperation within the group**

- Unify and promote the brands
- Consolidate / expand the product portfolio
- Strengthen sales and marketing

"Laserway Solution" : Solutions for realizing a complete transition to optical LAN networks



## 2. Create and strengthen businesses designed to solve social issues

### (1) Maximize profits in existing businesses through a focus on capital efficiency directed at 2025

## 【Power cable systems】

### Leverage the group's strengths to secure profit growth and medium to long-term business growth



Realize a carbon-free society



Realize tougher infrastructure



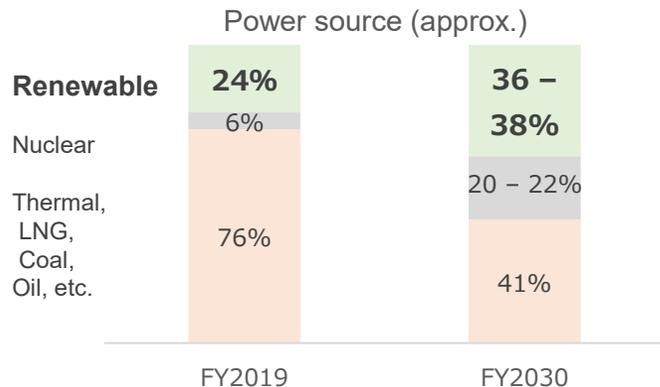
Realize a recycling-based society



### Business environment

#### □ Medium to long-term market growth in Japan

- Carbon neutral by 2050  
Launch of offshore wind projects  
Start of wide-area DC interconnection projects
- Increase resilience of the power grid  
Continued trunk line renewal



Source: Review of energy supply and demand in FY2030 (related document)  
Issued in October 2021 by the Agency for Natural Resources and Energy

#### ■ Insufficient installation capacity at the market

### Business strategy

#### Establish a business base in the target domains

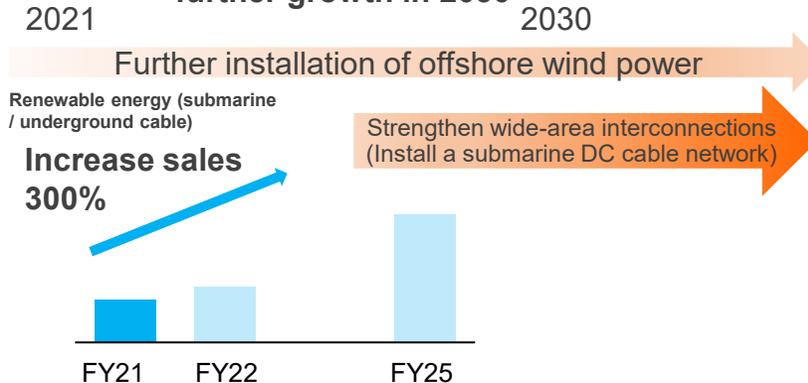
⇒ Leverage the strengths to grow profits

- Japan extra-high voltage underground cable  
...Increase grid resilience, secure stable electricity supply
- Renewable energy (submarine / underground cable)  
...Extensive experience and technological capability
- Overseas (Asia) submarine cable  
...Respond to demand for high quality infrastructure

#### Respond to offshore wind power and wide-area interconnections

⇒ Secure medium to long-term business growth

Triple sales in FY2025, and achieve further growth in 2030



### Initiatives for realizing the strategy

#### Secure orders and profits in the target domains

#### Increase cable manufacturing capacity

Double capacity in FY2025 (compared to FY2017)



#### Increase installation capacity

Double capacity in FY2025 (compared to FY2017)



#### Promote technology development

- DC / extra-high voltage cable and components
- NEDO / GI Fund projects (high voltage dynamic cable, TLP floating structures, submarine cable laying vessels)

#### Strengthen the renewable energy / DC business

Intangible sales:  
Provide project support services (planning, operation, maintenance)

**【Wire harness】**

Expand the business, increase profitability and promote redundancies / resilience in the supply chain



Realize next generation infrastructure that enjoys universal mobility

**Business environment**

- Increased customer needs for lighter weight
  - Accelerated shift to EV in response to the trend toward carbon neutral



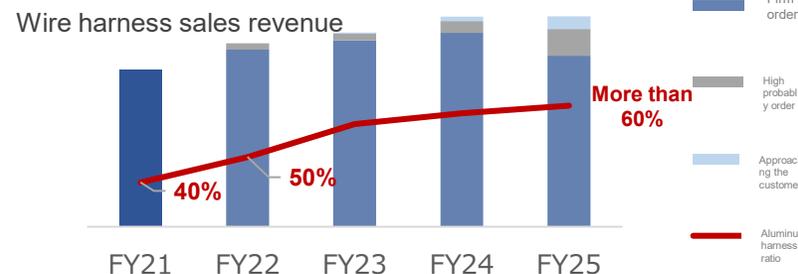
- Demand assumption: CAGR of +4 - 5% (Estimate by Furukawa Electric)
  - Impact of the semiconductor shortage is expected to remain ongoing until FY23

- Continued supply chain issues
  - Further BCM related requirements from customers
  - Soaring transportation expenses will remain prolonged

**Business strategy**

Maintain superiority in aluminum harnesses  
 Expand the harness business and increase profitability  
 Reap the benefits from the investments in increased production

Aluminum wire harness use  
 Expand from 56 models of 6 manufacturers in the end of FY21 to 100 models of 8 manufacturers in FY25



Promote redundancies/  
resilience in the supply chain  
 Enhance the supplemental  
production systems at multiple sites  
 Bridge production, optimized production network  
 Secure “strategic space”  
 Reduce required manpower and  
space through automation

**Initiatives for realizing the strategy**

Secure orders and make α terminals the defacto standard

Promote awareness of the superiority and reliability

- Integrated production from the aluminum casting to cable manufacturing and laser machining of the terminals
- High corrosion resistance of the α terminals



Prepare a response for next generation wiring systems (from FY25)

Logistics response

Secure multiple logistics routes and containers

Appropriate inventory response

Consider BCM and reestablish appropriate inventory levels in partnership with customers

2. Create and strengthen businesses designed to solve social issues  
 (1) Maximize profits in existing businesses through a focus on capital efficiency directed at 2025



Realize a carbon-free society



Realize tougher infrastructure



Realize a recycling-based society



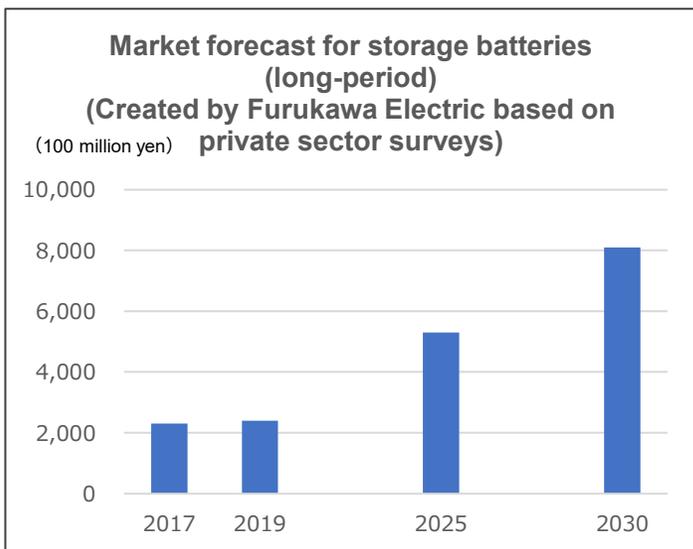
**【Bipolar lead storage batteries】**

Contribute through safe, long-life, low cost, recyclable batteries

**Business environment**

□ **Rapid growth of the storage battery market**

- Increased installation of renewable energy



**【Customer requirements】**

- Safe, longer life, easily recycled
- Minimize total life cycle costs

**Business strategy**

Strength in safe, long-life, low cost, recyclable

⇒ **Play a leading role in the renewable energy / long-period market**



**Step 1: Quickly commercialize products**

**Step 2: Expand the business through**

**KOTOZUKURI**

Medium to long-term sales growth

Expand (Increase customers)

Approx. JPY 3.0 billion

Expand the business through KOTOZUKURI

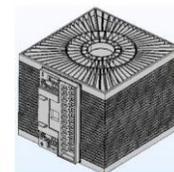


**Initiatives for realizing the strategy**

**Provide samples and definitely launch mass production**

Participate in local government Project\* (FY22)

\*"EV-Centered Urban Development Project" by Kamiho-cho, Saga Prefecture and the Kyushu Electric Power Group



**Promote sales**

With a focus on the renewable energy market, create products that incorporate customer feedback

- High reliability and compatibility with power storage systems

**Advance into the area of "KOTOZUKURI"**

Expand the business domains to include systems for realizing the stable use of renewable energy and maintenance / service

【Tape for semiconductor process】

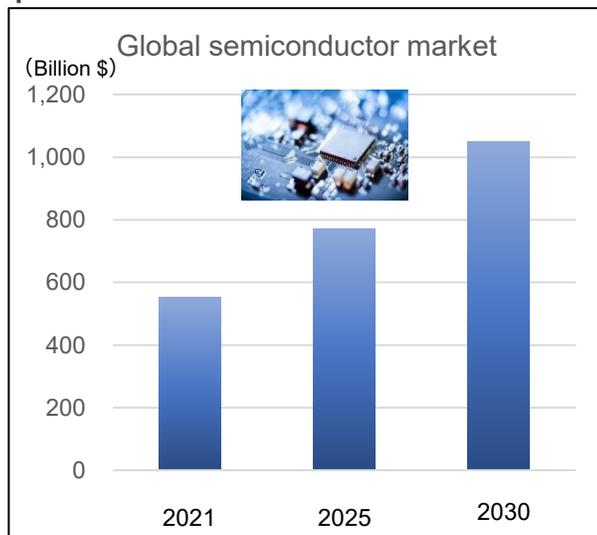
Secure a stable supply network and continue to provide high performance/ well differentiated products



Realize a B5G society

Business environment

- Medium to long-term demand growth in the semiconductor market
- Increased requirements for lower environmental impact



※Estimate by Furukawa Electric

【Market changes and technology issues】

- More heat generated from the wiring due to higher densities
- Thinner wafers as a result of 3D stacking in response to increased data volume

Business strategy

Continued semiconductor demand growth

⇒Secure a stable supply network

Increase sales 1.8 times



Device & process advancements  
 Enhance the strengths in technology & MONOZUKURI

⇒Continue to provide high performance / well differentiated products

Adhesive, thermal conduction, base film design

Initiatives for realizing the strategy

Expand production capacity

CAPEX: Approx. JPY 7.0 bil. (FY22-FY25)  
 Start construction in Sept. 2022 with mass production planned to start in April 2025

- ※Implement measures to reduce environmental impact
- Waste heat collection
  - Solar power



New building and manufacturing line at the Mie Works



Response to technology issues

Response to heat generation

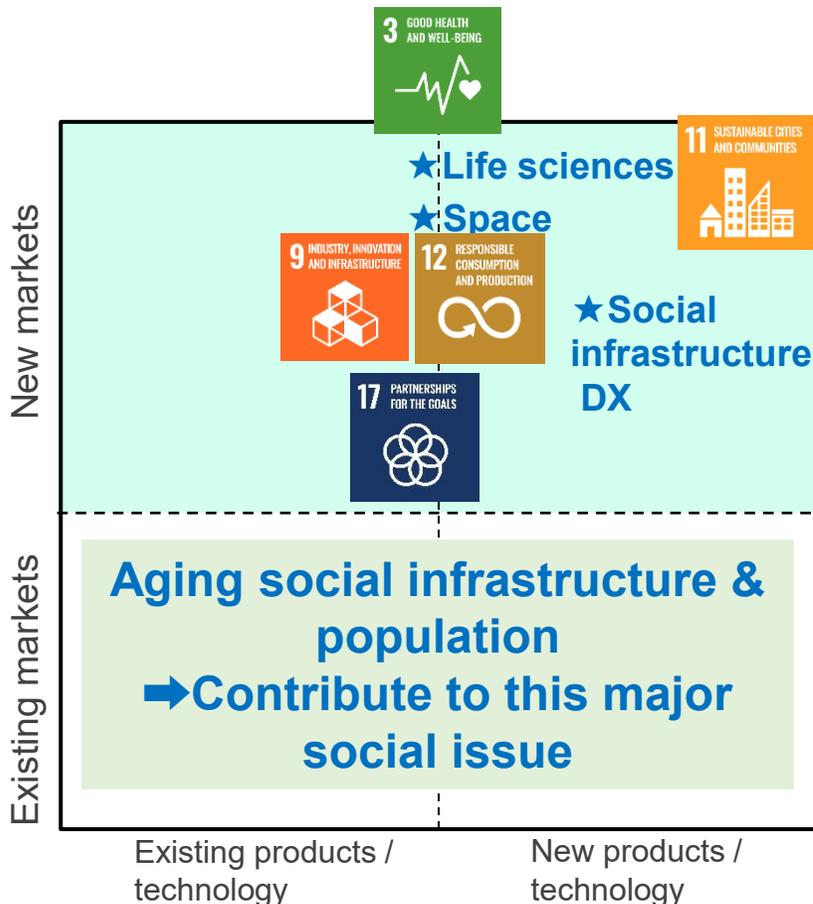
- Increase heat dissipation using adhesive film with high thermal conductivity

Response to thinner wafers

- Optimize through the base film and adhesion control

**From new businesses to businesses that contribute to maintaining social infrastructure and increasing healthy life expectancy**

**Use an Ansoff growth matrix to define the new businesses and identify new business domains**



**Social infrastructure DX**  
 Create a database of various data including position data and imaging

**Commercialized in FY2021 for national & local governments, construction consultants and highway corporations**

Fiscal year	Growth rate
2020	0
2021	~10
2022	~40
2023	~70
2024	~140
2025	~280

**Life sciences**  
 Photonics technology + proposal capability that anticipates medical practitioners' jobs

Optical waveguide      Optical fiber      Semiconductor laser

**TELLUMING**  
 Detection solutions using an internal medical device

Currently conducting trials with a medical device manufacturer with planned commercialization in FY2023

**ATONARP**      **FURUKAWA ELECTRIC**

Commercialize a measurement platform by 2025

**Accelerate the growth of new businesses**

**Strategic investment      Agile implementation**

2. Create and strengthen businesses designed to solve social issues

(1) Maximize profits in existing businesses through a focus on capital efficiency directed at 2025

**R&D  
expenses**

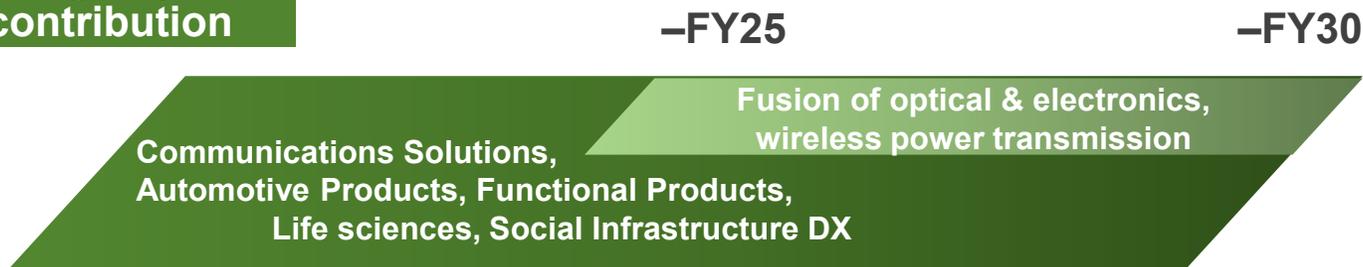
**Focus on R&D activities with an emphasis on profit creation**  
**Within the 2025 MTMP period, contribute to the new domains where businesses have been established**

**【Priority domains】**

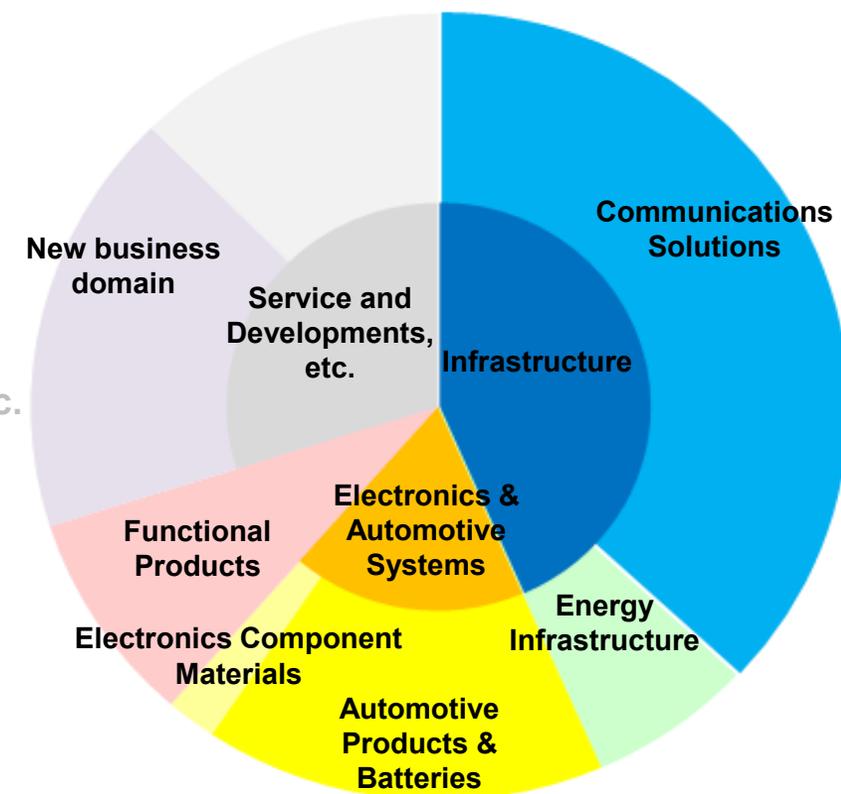
- **Communications Solutions:** RR cable, optical devices, networking systems
- **Automotive Products:** Wire harnesses, SRC, peripheral monitoring radar
- **Functional Products:** Data center products
- **New businesses:** **【New domains】** Life sciences, social infrastructure DX

**【Information/energy/mobility】** Fusion of optical / electronics, hybrid lasers, wireless power transmission, etc.

**Timing of profit contribution**



**FY22 – FY25 cumulative  
JPY 100.0 billion**



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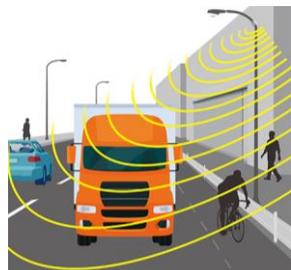
2. Create and strengthen businesses designed to solve social issues  
**(2) Build a foundation for creating new businesses by 2030**

**Based on the group's core technologies, contribute to the realization of next generation networks as an IOWN partner**

Utilizing photonics and wireless technology, "support simultaneous realization and be a valued partner"



光ファイバによる屋外外周セキュリティ



**Create photonics products that will solve the social issues in 2030**

**2022**



Excitation light source for Raman amplifiers



Semiconductor optical amplifier for silicon photonics



High speed modulator



High output DFB external light source



Ultra-small tunable laser



Optical fiber with new functions

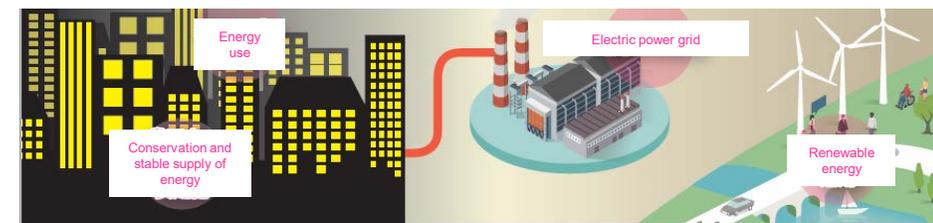
**2030**

In April 2022, launched the "Project for the creation of next generation photonics businesses" reporting directly to the president

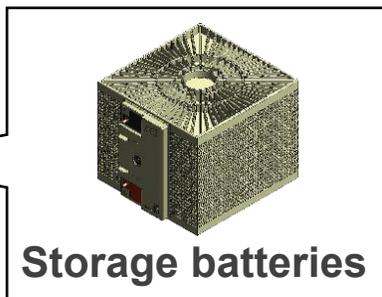
2. Create and strengthen businesses designed to solve social issues  
 (2) Build a foundation for creating new businesses by 2030

Become carbon neutral together with the local communities through increased local independence and “local production, consumption & succession✳” of energy

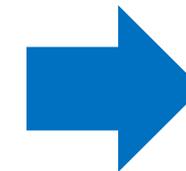
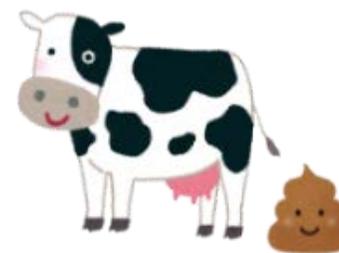
- ① Eliminate or reduce direct CO<sub>2</sub> emissions
- ② Eliminate or reduce CO<sub>2</sub> emissions by society
- ③ Capture or transform the CO<sub>2</sub> that is emitted



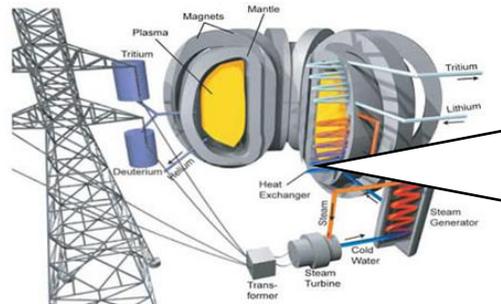
Store energy



Generate green LP gas from manure

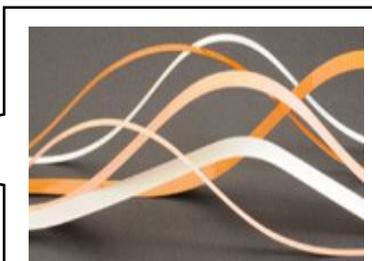


Create clean energy



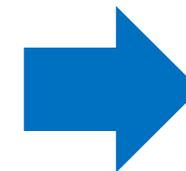
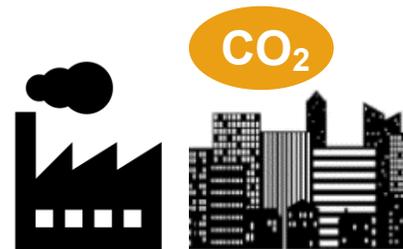
Source: <https://fusionforenergy.europa.eu/Understandingfusion/demo.aspx>

Nuclear fusion



Superconducting materials

Transform CO<sub>2</sub> into chemical products



✳Local production, consumption and succession: In addition to local consumption of local production, pass down the local resources and culture to future generations

2. Create and strengthen businesses designed to solve social issues

**(2) Build a foundation for creating new businesses by 2030**

**R&D expenses**

Increase profits in new domains and create new businesses that solve social issues in the domains that combine information, energy and mobility

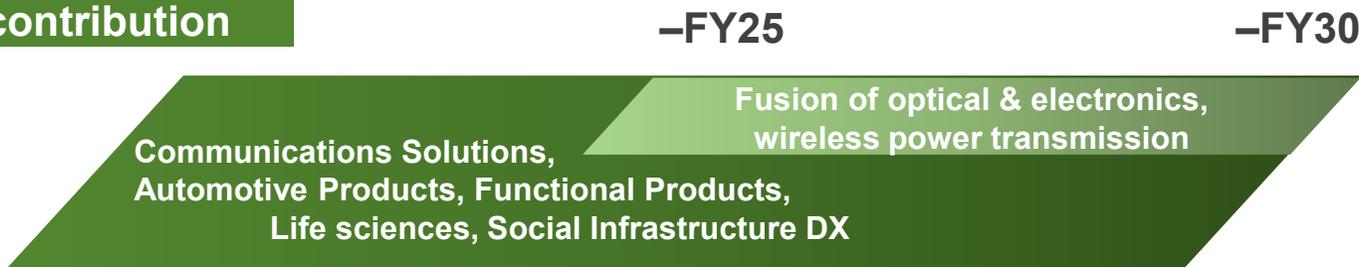
**【Priority domains】**

- Communications Solutions: RR cable, optical devices, networking systems
- Automotive Products: Wire harnesses, SRC, peripheral monitoring radar
- Functional Products: Data center products
- **New businesses: 【New domains】 Life sciences, social infrastructure DX**

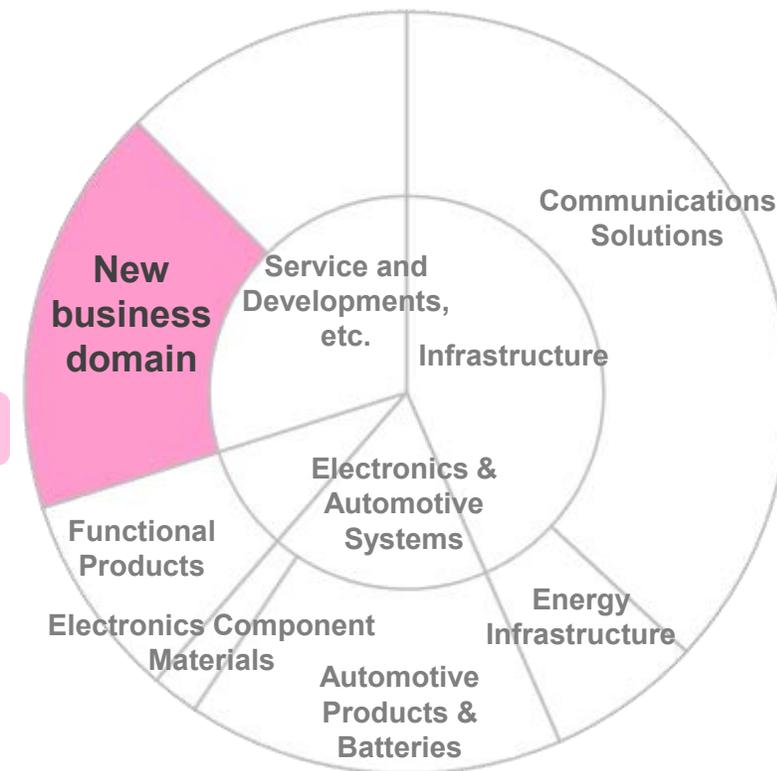
**【Information/energy/mobility】 Fusion of optical / electronics, hybrid lasers, wireless power transmission, etc.**

R&D expense growth rate for new businesses: 125% (FY25 sustainability indicator\* (compared to FY21))

**Timing of profit contribution**



**FY22 – FY25 cumulative  
JPY 100.0 billion**



\*Sustainability Indicators (reference P43 Appendix)

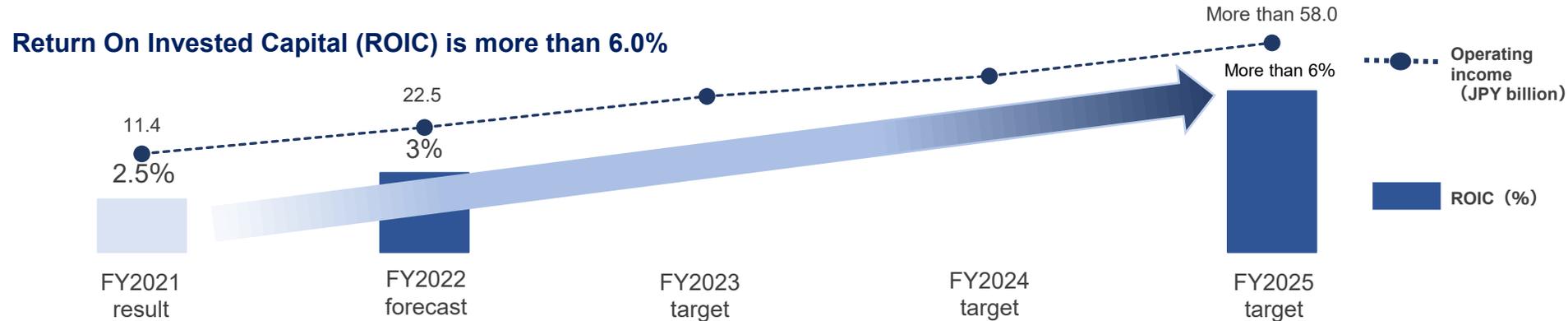
# Contents of today's presentation

1. Vision 2030 and positioning of 2025 Mid-term Plan
2. Create and strengthen businesses designed to solve social issues
  - (1) Maximize profits in existing businesses through a focus on capital efficiency directed at 2025
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- 3. Numerical management targets and allocation of management resources**
4. Strengthen the foundation for ESG management

### 3. Numerical management targets and allocation of management resources

## Financial goals (formulating 25 Mid-term Plan)

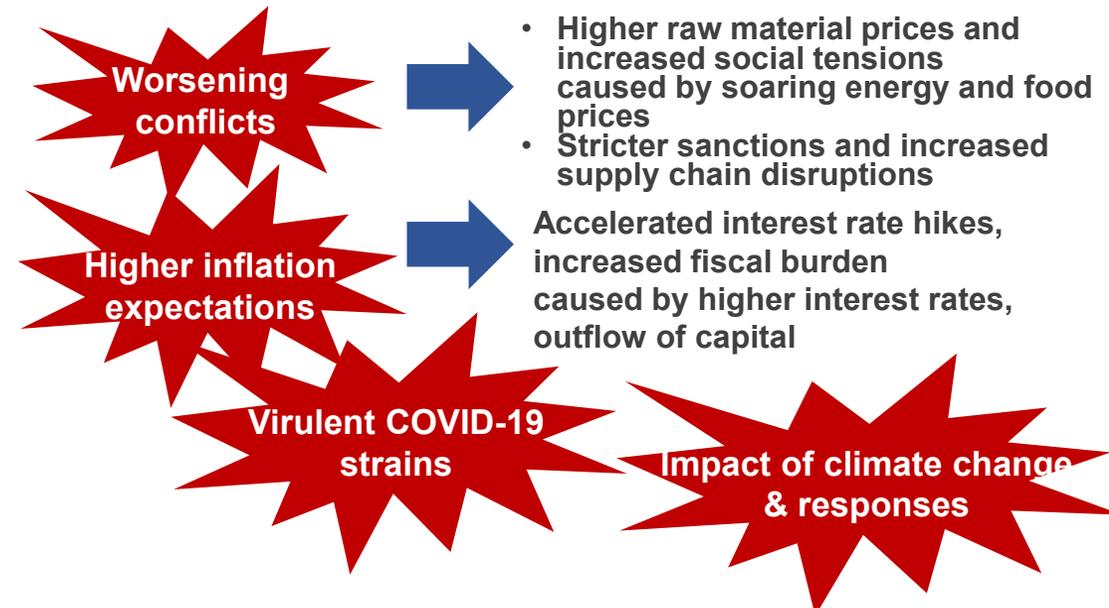
While incorporating the business risks with consideration for the external environment, realize “increased capital efficiency” through business growth and cost cutting



### Global growth forecast (IMF)

	April 2022 forecast		Change from October 2021 forecast		Reason for the downward revision
	2022	2022–2025	2022	2022–2025	
	Vs. last year (%)	Average growth rate (%)	(% points)	(% points)	
Global	3.6	3.5	▲ 1.3	▲ 0.3	Direct and indirect impact of the situation in Russia and Ukraine
Japan	2.4	1.5	▲ 0.8	0.0	Lower consumption and investment due to higher import prices
U.S.	3.7	2.3	▲ 1.5	▲ 0.4	Monetary tightening and lower fiscal expenditures
EU	2.8	2.1	▲ 1.5	▲ 0.2	Higher energy prices and supply chain disruptions
China	4.4	4.9	▲ 1.2	▲ 0.4	Zero-COVID policy and slowing real estate investment

### Risk balance has “tilted lower”



### 3. Numerical management targets and allocation of management resources

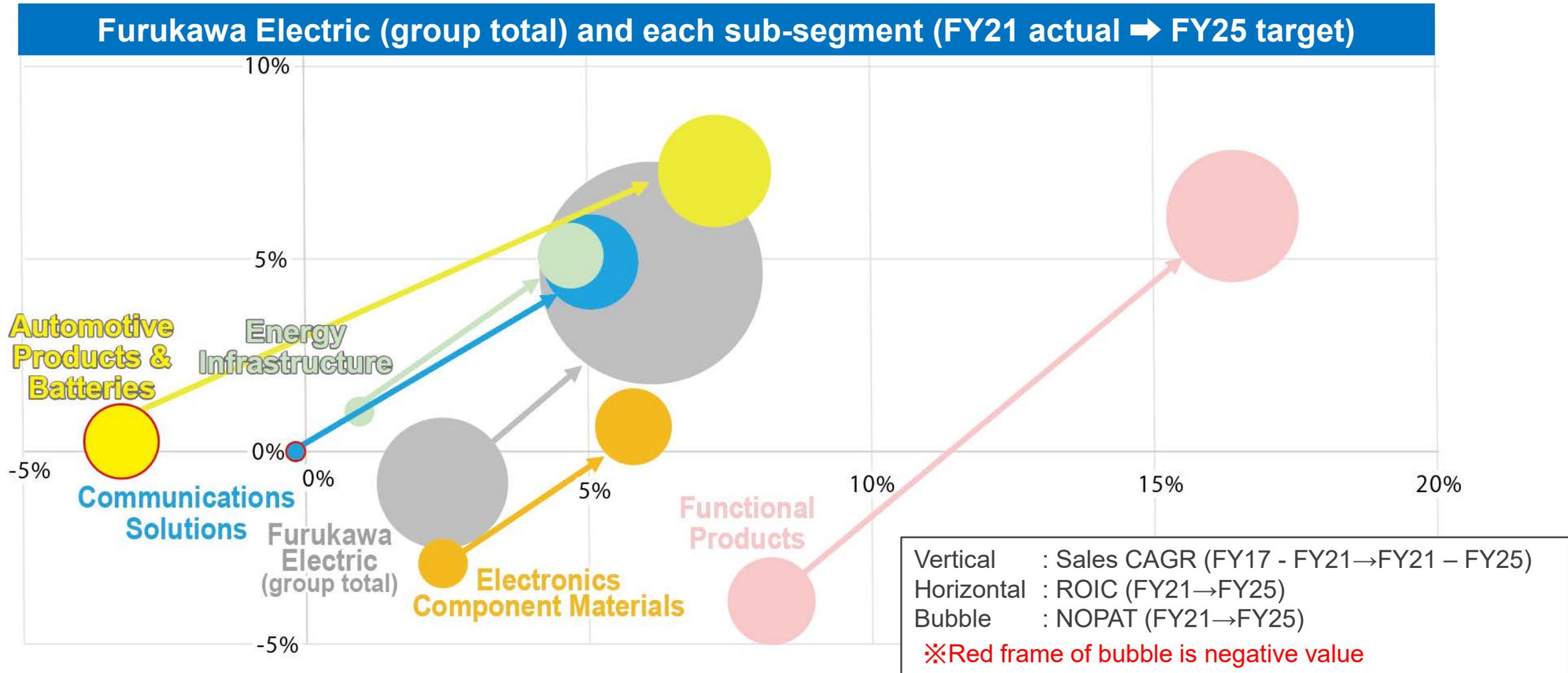
## Financial goals

	FY2021 result	FY2022 forecast		FY2025 target
<b>ROIC</b> (after tax)	2.5%	3%	▶	<b>More than 6%</b>
<b>ROE</b>	3.7%	5%	▶	<b>More than 11%</b>
<b>Net D/E ratio</b>	1.0	1.0	▶	<b>Less than 0.8</b>
<b>Capital ratio</b>	29.8%	30%	▶	<b>More than 35%</b>
<b>Sales</b>	JPY 930.5 billion	JPY 1,050.0 billion	▶	<b>More than JPY 1,100.0 billion</b>
<b>Operating income</b>	JPY 11.4 billion	JPY 22.5 billion	▶	<b>More than JPY 58.0 billion</b>
<b>Net income attributable to owners of the parent</b>	JPY 10.1 billion	JPY 14.0 billion	▶	<b>More than JPY 37.0 billion</b>
<b>Average copper price (JPY/Kg)</b>	1,136	1,260		<b>1,085</b>
<b>Average exchange rate (JPY/dollar)</b>	112	120		<b>110</b>

### 3. Numerical management targets and allocation of management resources

## Business portfolio optimization and allocation of management resources

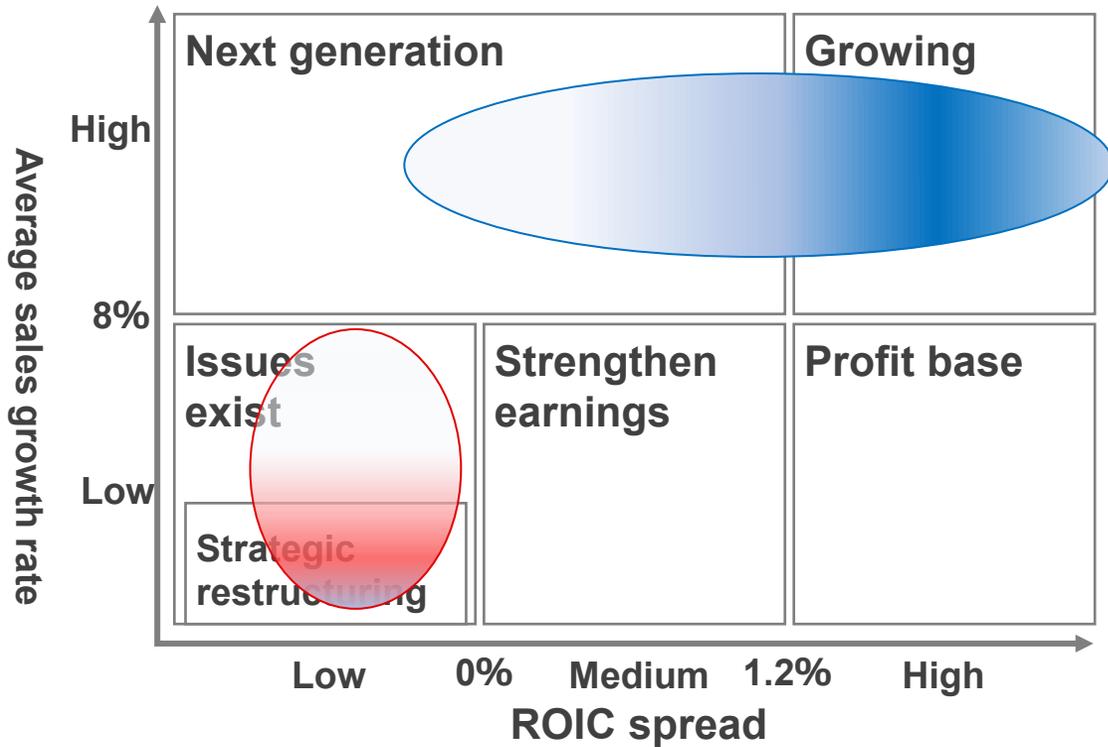
Steadily optimize the business portfolio, and aim to achieve ROIC of at least 6% by FY2025



By making the position of each business visible and optimizing the investment allocation based on that positioning, transform management and the decision making process so it will have increased awareness of capital costs

1. Make the current status and positioning visible
2. Decide the allocation of management resources (investment)

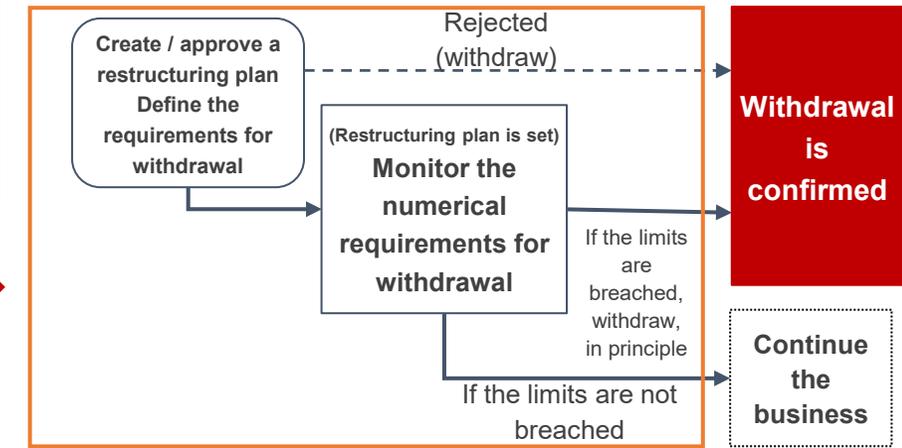
3. Reorganize the business portfolio



Search for growth opportunities, including M&A

Decide the need to withdraw

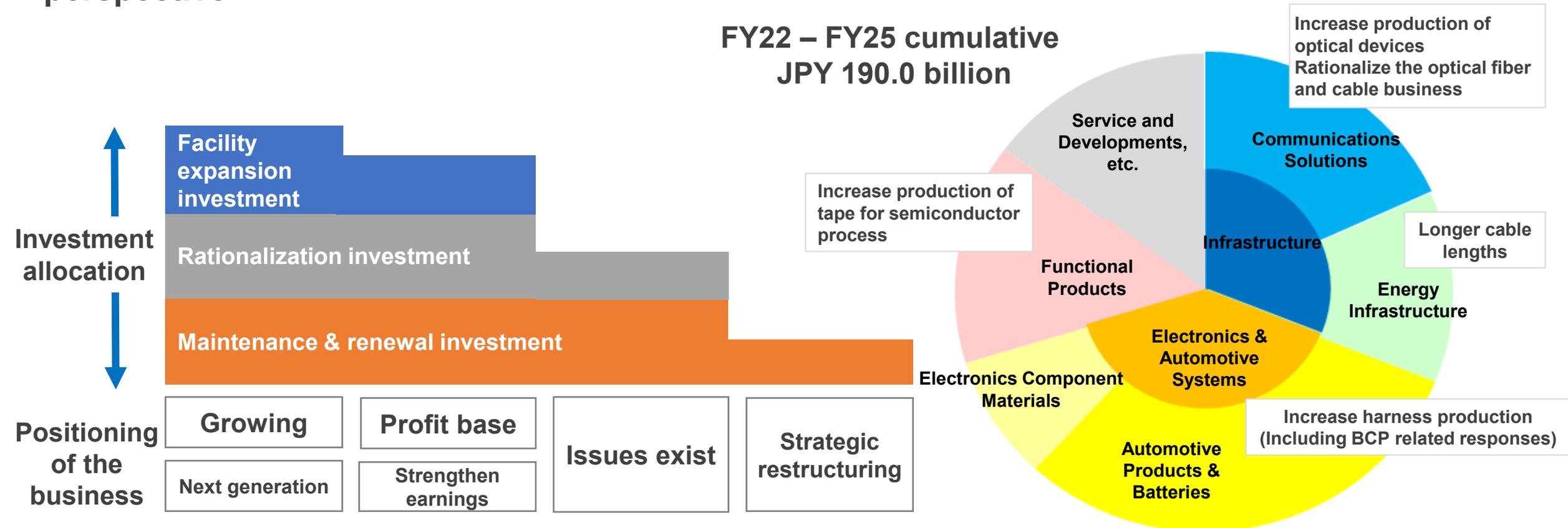
- + Potential for future growth
- + Competitive status among competitors
- + Carbon efficiency



3. Numerical management targets and allocation of management resources  
 Business portfolio optimization and allocation of management resources  
 (CAPEX / strategic investment)

Based on the positioning of the business, implement controlled execution of well-defined investments, and make investments in DX and environmental responses from a companywide perspective

FY22 – FY25 cumulative  
 JPY 190.0 billion



- Includes JPY 16 bil. in DX investment and JPY 6.0 bil. investment in environmental responses
- In addition to CAPEX, incorporate strategic investments (such as M&A) of JPY 50 bil. into the plan

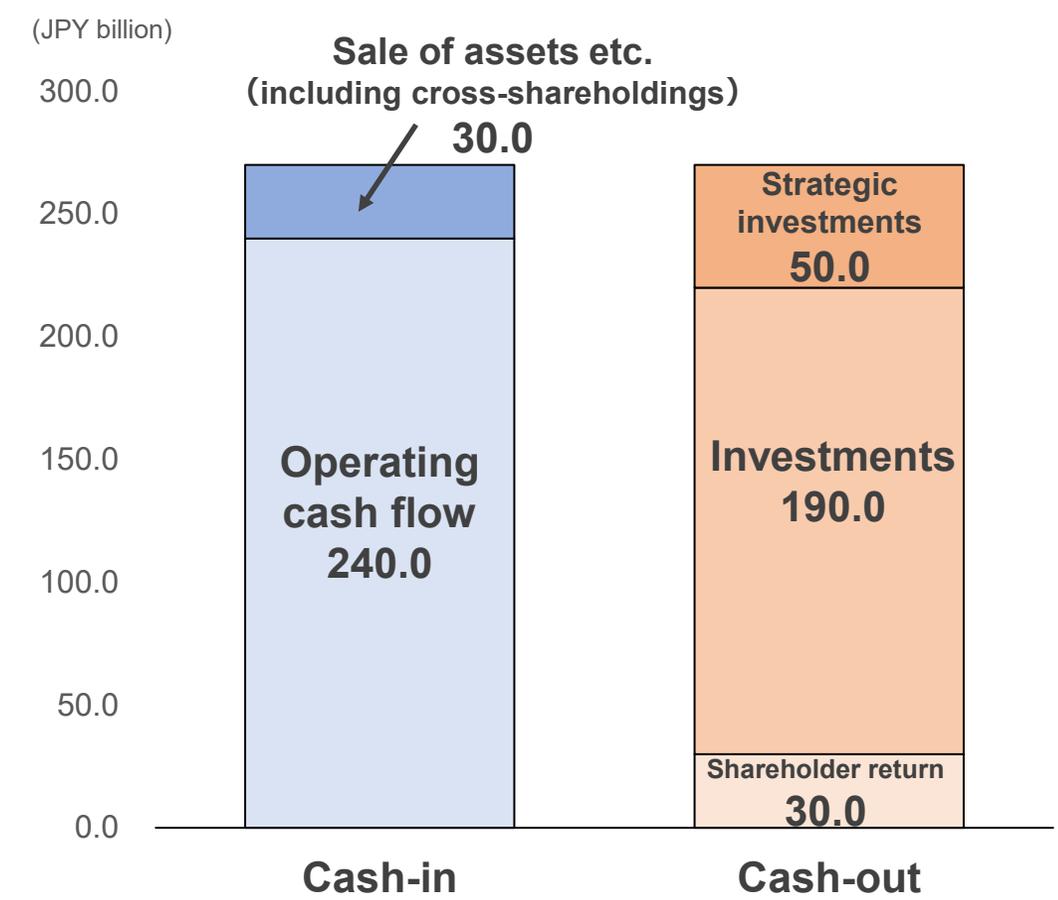
### 3. Numerical management targets and allocation of management resources

## Capital and cash allocation policy

Through investment in growth domains and securing a financial foundation for achieving growth, aim to sustainably increase corporate value

<p><b>Well-defined investments and controlled execution</b></p>	<p><b>CAPEX allocation based on the positioning of the business</b>  <b>Actively invest in businesses that will drive growth</b>          Transform the business structure of the overall group          Set a framework for strategic investments</p>
<p><b>Secure a healthy financial foundation</b></p>	<p><b>Management focused on capital efficiency</b>          Stabilize financial health          Maintain and improve the credit rating  <b>Healthy capital / debt structure</b>          Procure capital through interest-bearing debt based on consideration for the balance with earnings capability (EBITDA)</p>
<p><b>Clarify the policy for shareholder returns</b></p>	<p><b>Set a quantitative target for the dividend payout ratio</b>          Payout ratio of 30%</p>

2025 Mid-term Plan (FY2022 – 2025) cumulative

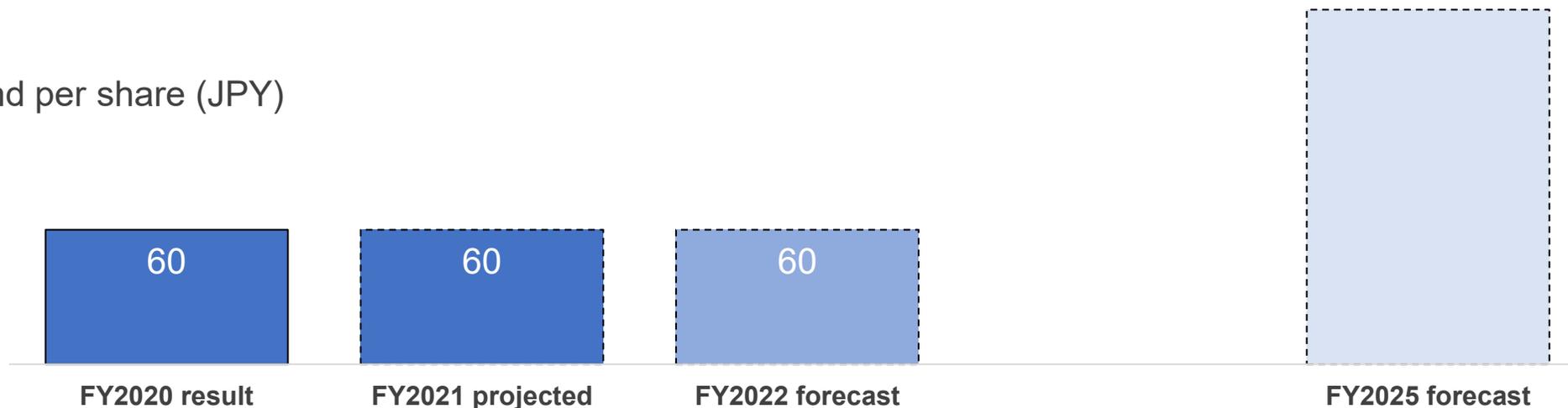


## Shareholder returns

### Basic policy:

During the 2025 Medium-term Management Plan (fiscal year ending March 2023 – March 2026), along with working to increase corporate value through profit growth and focused investments in growth domains, Furukawa Electric has designated stable and ongoing shareholder returns as a basic policy and will issue a performance linked dividend based on a payout ratio of about 30% of consolidated net income attributable to owners of the parent company.

Annual dividend per share (JPY)



	FY2020 result	FY2021 (result / projected)	FY2022 (forecast)
Consolidated net income attributable to owners of the parent	JPY 10.0 billion	JPY 10.1 billion	JPY 14.0 billion
Dividends payout ratio	42.3%	41.8%	30.2%

FY2025 forecast
More than JPY 37.0 billion
30%

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4. **Strengthen the foundation for ESG management**

# 4. Strengthen the foundation for ESG management

## Strengthen the corporate functions that support business growth

Priority “materiality” directed at achieving Vision 2030

Opportunities	1	<p><b>Create businesses that solve social issues</b></p> <p>Create businesses that support next-generation infrastructure Create environment-friendly businesses</p>
	2	<p><b>Open, Agile, Innovative</b></p>
	3	<p><b>Build partnerships with various stakeholders</b></p>
Risks	E	<p>Develop business activities that consider climate change</p>
	S	<p>Strengthen human capital management and organizational execution abilities</p>
	G	<p>Build a governance system to strengthen risk management</p> <p>Corporate governance      Supply chain management Group governance          Human rights &amp; labor practices</p>

Set “sustainability indicators and targets” to be achieved during the 2025 Mid-term plan

**GHG emissions reductions** (Scope1, 2)  
(Compared to FY17) **28 % reduction**

**Ratio of renewable energy use to total consumption**  
(FY17: 8%) Global **13 %**

**Ratio of female managers**  
(at Furukawa Electric) **7 %**  
(FY21: 3.8%)

**Implementation of training on human rights risks**  
(Start from Japan in FY22) All managerial positions globally **100 %**

※Refer to the Appendix for the other sustainability indicators and targets



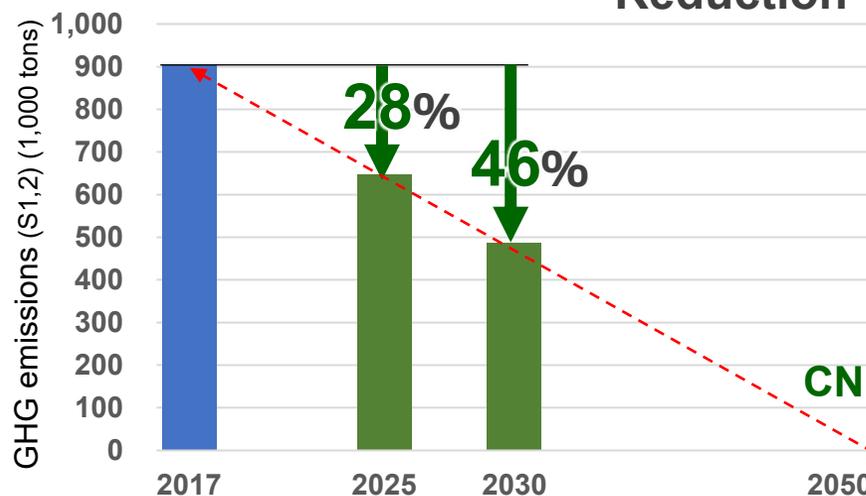
**Become carbon neutral in 2050 (Scope 1, 2)**

**1. Eliminate or reduce direct CO<sub>2</sub> emissions**

Energy saving, switch fuels, increase recycling rate, use renewable energy

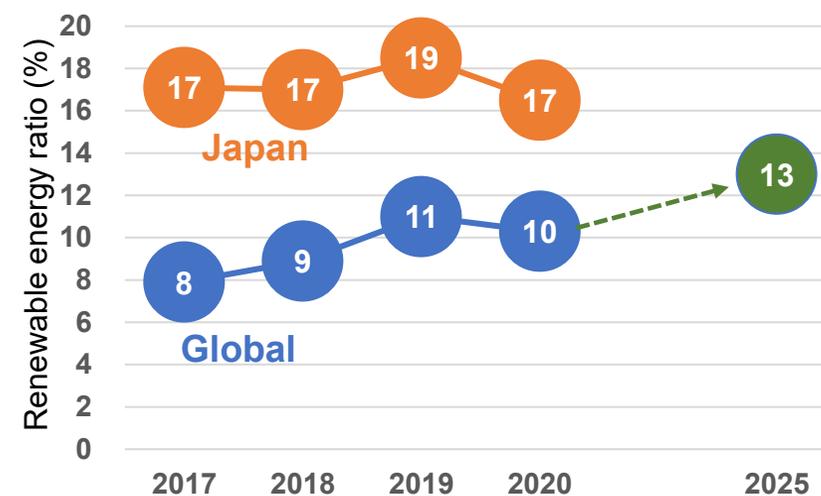
**GHG emissions reduction rate**  
(Scope 1, 2)  
(Compared to FY17)

**FY25 28% Reduction**



**Ratio of renewable energy use to total consumption**

**FY25 13%**



**2. Eliminate or reduce CO<sub>2</sub> emissions by society**

Aluminum wire harnesses, power cable for offshore wind power, bipolar storage batteries

**3. Capture or transform the CO<sub>2</sub> that is emitted**

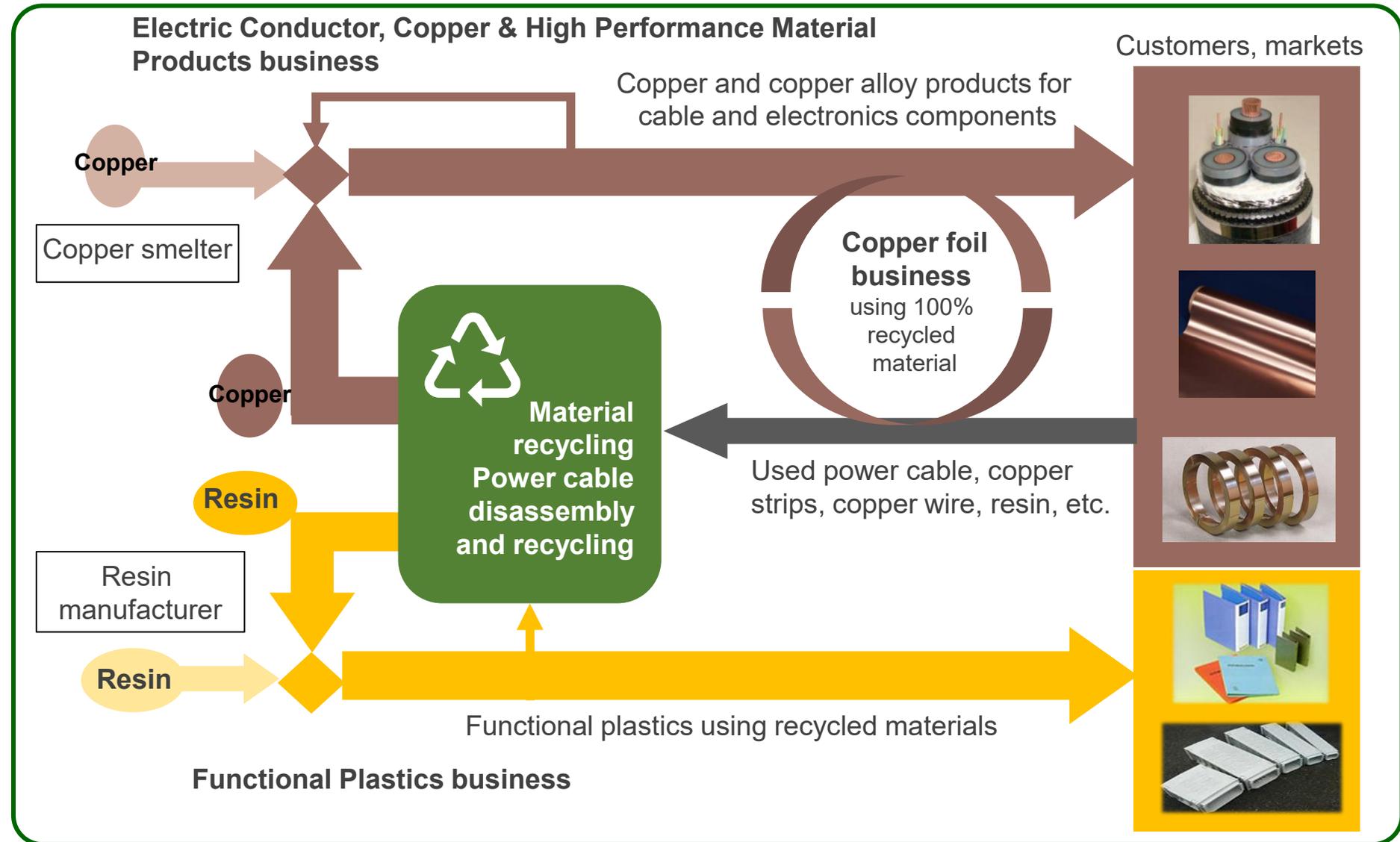
Generate green LP gas using original catalyst technology (metal encapsulated zeolite)

# 4. Strengthen the foundation for ESG management

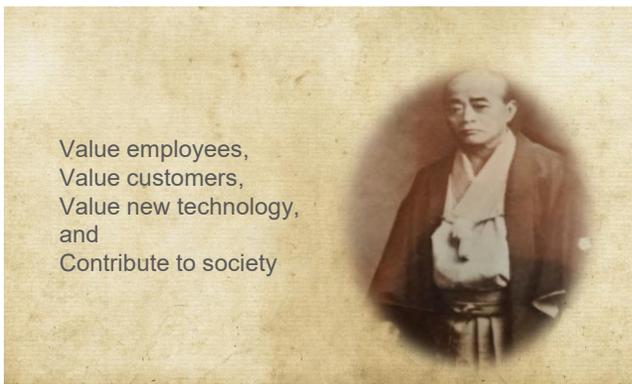
## Strengthen the corporate functions that support business growth



Initiatives for establishing closed-loop production



## Founder's beliefs



## Furukawa Electric Group People Vision

The people of Furukawa Electric Group are our greatest value. We recognize that investment in the development of our people will enable sustainable long-term success of our Group.

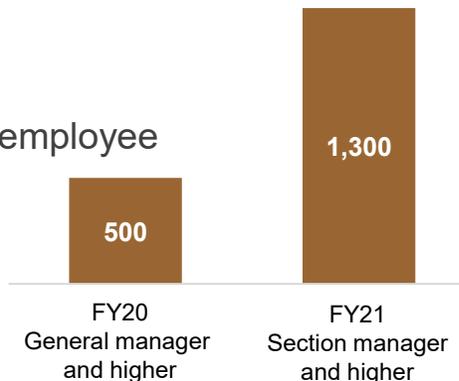
## Create a corporate culture of “following through as a team”

### Individuals

New challenges and growth  
 Independent career formation  
 Work satisfaction & engagement



Course participants



### Superiors

Support the growth of each employee  
 Build good teams  
 Achieve results as a team

### Basic stance

Secure diversity  
 Cultivate an open, agile, innovative organizational culture



### Employee engagement score

FY22: Start measuring  
 → FY23: Set targets

### Ratio of female managers

(FY21: 3.8%)  
 (at Furukawa Electric)

FY25 **7%**

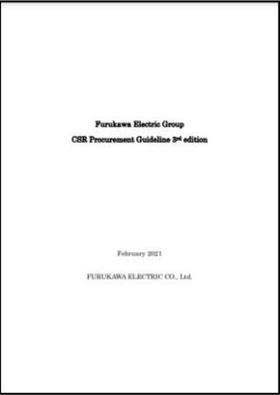
### Ratio of career track hiring among total staff hiring

(FY21: 37%)  
 (at Furukawa Electric)

FY25 **30%**

Promote in accordance with the UN’s Guiding Principles on Business and Human Rights

Revise the CSR Procurement Guidelines (Ver. 3)



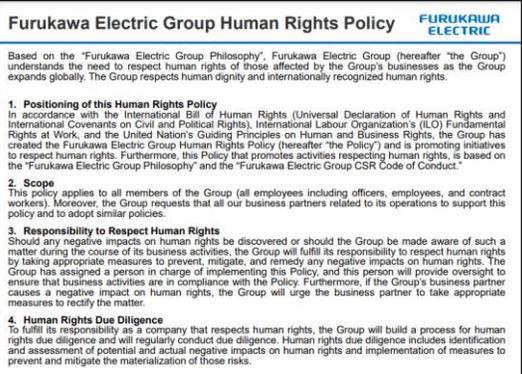
Human rights due diligence

**SAQ\* implementation based on CSR Procurement Guidelines**  
 Subject entities:  
 Major suppliers and Group companies

**SAQ\* implementation rate**  
 Major suppliers at the global manufacturing sites  
 FY25 **100%**

\* Self Assessment Questionnaire

Set a human rights policy



**Promote awareness of the human rights policy and provide human rights training**  
 Subject entities:  
 Furukawa Electric and group companies

**Provision of training on human rights risks**  
 All managerial positions globally  
 FY25 **100%**

# Create new value together with customers and solve the social issues



## Furukawa electric group Vision 2030



In order to build a more sustainable world and make people's life safe, peaceful and rewarding, Furukawa Electric Group will create solutions for the new generation of global infrastructure combining information, energy and mobility.

Thank you very much  
for your attention

***Bound to***  ***Innovate***

(JPY billion)	FY2021 result			FY2022 forecast			FY2025 target		
	Sales	Operating income	Ratio	Sales	Operating income	Ratio	Sales	Operating income	Ratio
<b>Infrastructure</b>	<b>297.0</b>	<b>5.2</b>	<b>1.7%</b>	<b>330.0</b>	<b>6.5</b>	<b>2.0%</b>	<b>360.0</b>	<b>16.0</b>	<b>4.4%</b>
Communications Solutions	191.3	3.8	2.0%	215.0	5.0	2.3%	230.0	11.5	5.0%
Energy Infrastructure	105.7	1.4	1.3%	115.0	1.5	1.3%	130.0	4.5	3.5%
<b>Electronics &amp; Automotive Systems</b>	<b>500.7</b>	<b>0.1</b>	<b>0.0%</b>	<b>575.0</b>	<b>10.0</b>	<b>1.7%</b>	<b>590.0</b>	<b>23.5</b>	<b>4.0%</b>
Automotive Products & Batteries	249.9	▲4.6	▲1.9%	295.0	6.0	2.0%	330.0	16.5	5.0%
Electronics Component Materials	250.8	4.8	1.9%	280.0	4.0	1.4%	260.0	7.0	2.7%
<b>Functional Products</b>	<b>130.0</b>	<b>7.6</b>	<b>5.8%</b>	<b>155.0</b>	<b>8.5</b>	<b>5.5%</b>	<b>165.0</b>	<b>19.5</b>	<b>11.8%</b>
<b>Service and Developments, etc.</b>	<b>34.5</b>	<b>▲1.4</b>	<b>▲4.0%</b>	<b>30.0</b>	<b>▲2.5</b>	<b>▲8.3%</b>	<b>40.0</b>	<b>▲1.0</b>	<b>▲2.5%</b>
<b>Total</b>	<b>930.5</b>	<b>11.4</b>	<b>1.2%</b>	<b>1,050.0</b>	<b>22.5</b>	<b>2.1%</b>	<b>1,115.0</b>	<b>58.0</b>	<b>5.2%</b>

Note about net sales in the Electronics Component Materials sub-segment within the Electronics & Automotive Systems segment

·FY25 net sales were calculated assuming copper price of JPY 1,085/kg (reason for lower net sales compared to FY22)

·If calculated using the copper price forecast level in FY22 (JPY 1,260/kg), net sales would be JPY 285.0 billion (higher than FY22)

# Appendix Sustainability Indicators

By achieving the sustainability indicators that contribute to resolving the materiality, aim to achieve Vision 2030.

## Materiality

					FY2021 result	FY2022 target	FY2025 target
Revenue Opportunities	1	Create businesses that solve social issues	Sales ratio of environmentally friendly products (Consolidated)	Consolidated	62%	64%	70%
	2	Open, Agile, Innovative Build partnerships with various stakeholders	R&D expense growth rate for new businesses (compared to FY21)	Consolidated	(100%)	115%	125%
	3		Implementation rate of IP landscaping for strengthening the businesses and themes for creating new businesses	Consolidated	17%	30%	100%
Risks	E	Develop business activities that consider climate change	GHG emissions reduction rate (Scope1,2) (compared to FY17)	Consolidated	▲28% (Estimate※)	▲17.7%	▲28.3%
			Ratio of renewable energy use to total consumption	Consolidated	10% (Estimate※)	11.5%	13%
	S	Strengthen human capital management and organizational execution abilities	Employee engagement scores	Non-consolidated	—	Start measuring	FY2023 Set targets
			Ratio of female managers	Non-consolidated	3.8%	4.5%	7%
			Ratio of career track hiring among total new staff hiring	Non-consolidated	37%	30%	30%
	G	Build a governance system to strengthen risk management	Ratio of SAQ implementation based on the CSR Procurement Guidelines for major suppliers	Consolidated	Non-consolidated 20%	Global 20%	100%
			Ratio of follow-up on risk management activities for all risk domains	Consolidated	88%	93%	100%
			Implementation rate of human rights training for managerial positions	Consolidated	—	Start in Japan	100%

※Estimated as of May 26 based on results up to Q3