

Medium-Term Management Plan (FY2020 – FY2024)



Arisawa Mfg. Co., Ltd.
May 9, 2024

Management Policy

In accordance with our long-standing motto, "Create, Innovate and Challenge", we pledge the following:

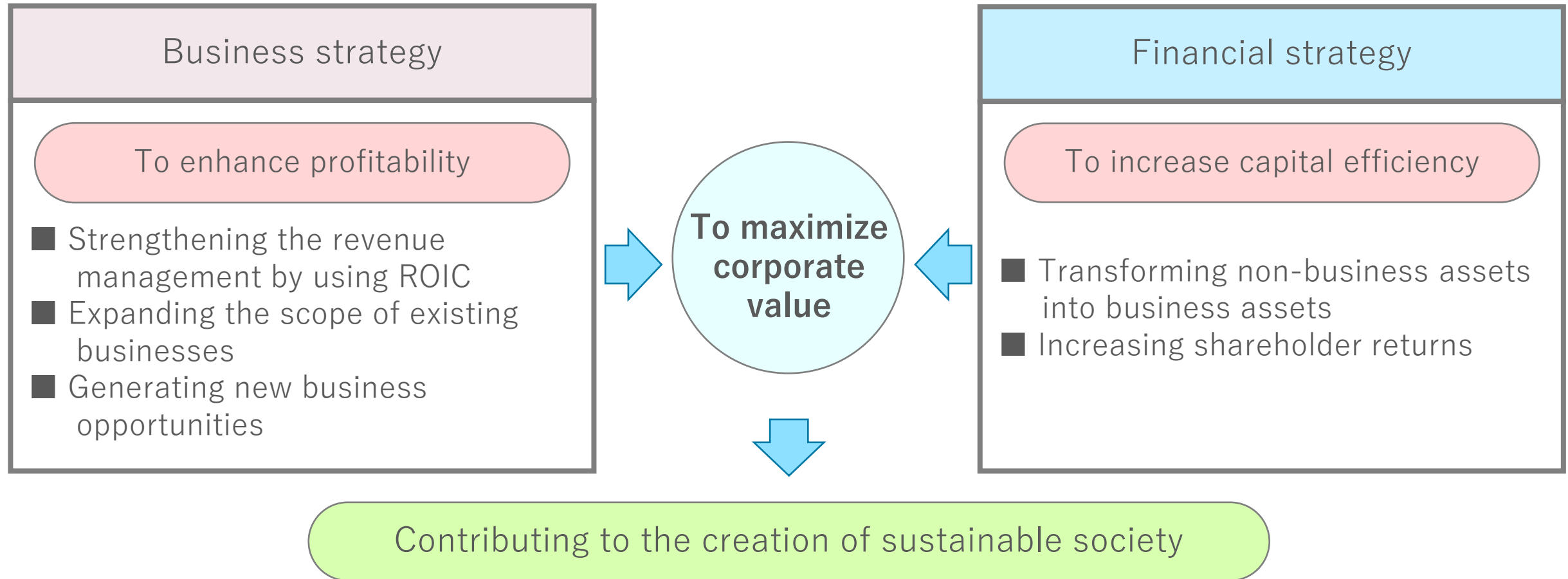
- I . To create new values and enhance customer satisfaction;
- II . To explore customer needs and generate new businesses with original technologies;
- III . To strengthen our corporate structure by boosting productivity and product quality;
- IV . To achieve our sustained growth by contributing to the solution of social and environmental issues.

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I . Policy of Medium-Term Management Plan

We use ROIC as our business management benchmark, and strive to maximize our corporate value by executing the following business and financial strategies.



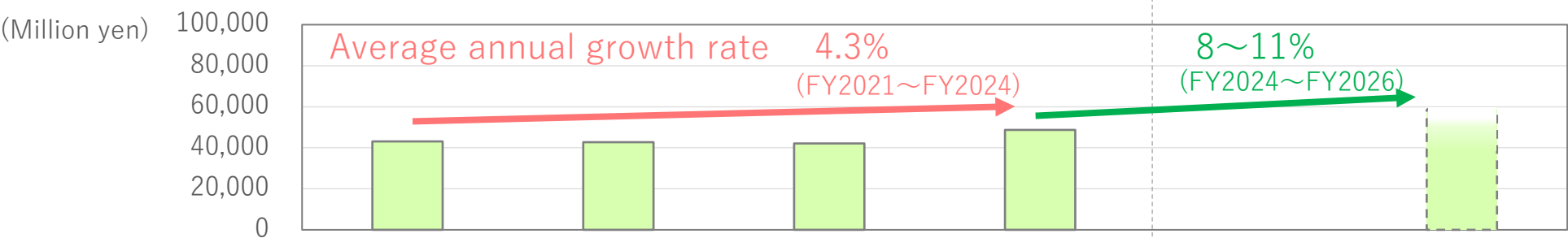
I -2 Review of Previous Medium-Term Management Plan



ROIC Goal is set 6.0% or more (FY2024)

←
WACC of 4.76% in FY2023
*1

Business performance of electronic materials, one of our group's main business fields, stagnated due to the downturn in the demand in Chinese market, but it is expected to recover from the fiscal year ending March 31, 2025. We expect the ROIC goal of 6% set in this medium-term management plan to be achieved in the fiscal year ending March 31, 2027.



	FY2021 (Actual)	FY2022 (Actual)	FY2023 (Actual)	FY2024 (Forecast)		FY2026 (Reference)
Sales (Million yen)	43,089	42,722	42,114	48,900		
Operating Profit (Million yen)	3,320	2,228	1,483	3,200		
Operating Margin (%)	7.7	5.2	3.5	6.5		
NOPLAT (Million yen)	2,424	1,627	1,083	2,300		
Equity + Interest-bearing debt (Million yen)	56,859	57,297	57,201	58,500		
ROIC (%) *2	4.4	2.8	1.9	3.9		6.0 or more

* 1 By our own calculation based on third party organization’s calculated value

* 2 NOPLAT (Net Operating Profit Less Adjusted Tax) / (Equity + Interest-bearing debt)

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We enhance profitability by
“expanding the scope of existing businesses” and “generating new businesses opportunities”.

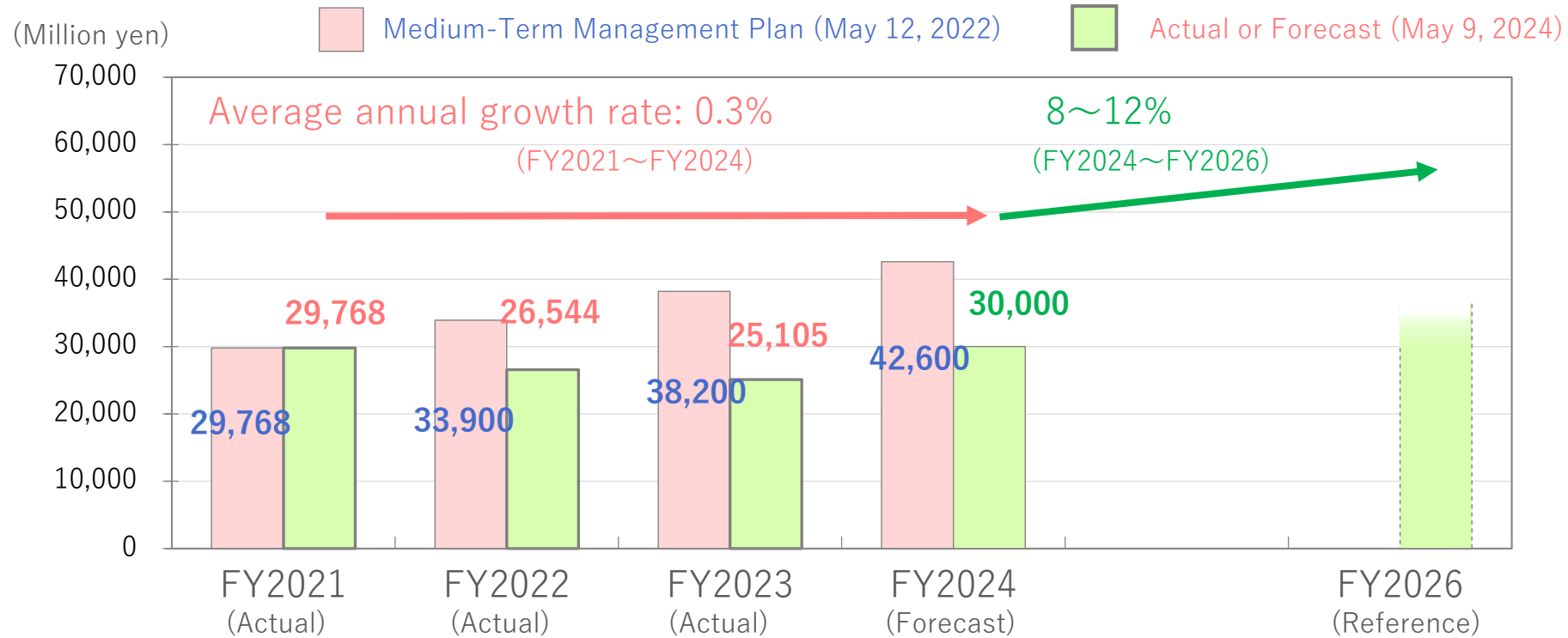
To expand the scope of existing businesses	To generate new businesses opportunities
<ul style="list-style-type: none">■ Developing differentiated products by using our original technologies■ Reducing costs thoroughly■ Increasing production capability and efficiency	<ul style="list-style-type: none">■ Expanding business through the flexible M&A and the development of new products using existing technologies
<ul style="list-style-type: none">● Discovering new applications and fields by strengthen partnership with our group’s companies	



Enhancement of profitability

II -1-1. Electronic Materials Segment

Plan and actual sales (forecast)



Medium-Term Management Plan as of May 12, 2022, was not achieved due to the continued inventory adjustment of semiconductors caused by the economic downturn in China from the second half of the fiscal year ended March 31, 2023. It has been finally bottomed out now and the economy will gradually recover from the fiscal year ending March 2025 onwards. We will focus on expanding its business in the semiconductor and in-vehicle fields.

II -1-1. Electronic Materials Segment

Aiming to grow as our primary business with two strategies

To expand the scope of existing businesses

Business enhancement in the mobile field

- Creating value for customers and continuous growth by offering products with originality
- Developing new products and strengthening the business foundation in the Asian markets by establishing ties with our group companies



Goals for FY 2024

Existing businesses

- Early market launch of new products (e.g., generative AI, fast communication, foldable, etc.)
- Capture the growth of demand in Chinese and other Asian markets
- Strengthen business foundation through alliances

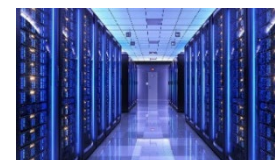
New businesses

- Semiconductor field: Expand production capacity and strengthen alliances
- In-vehicle field: Develop new products (materials with high heat dissipation, large current, etc.) and enter new fields

To generate new businesses opportunities

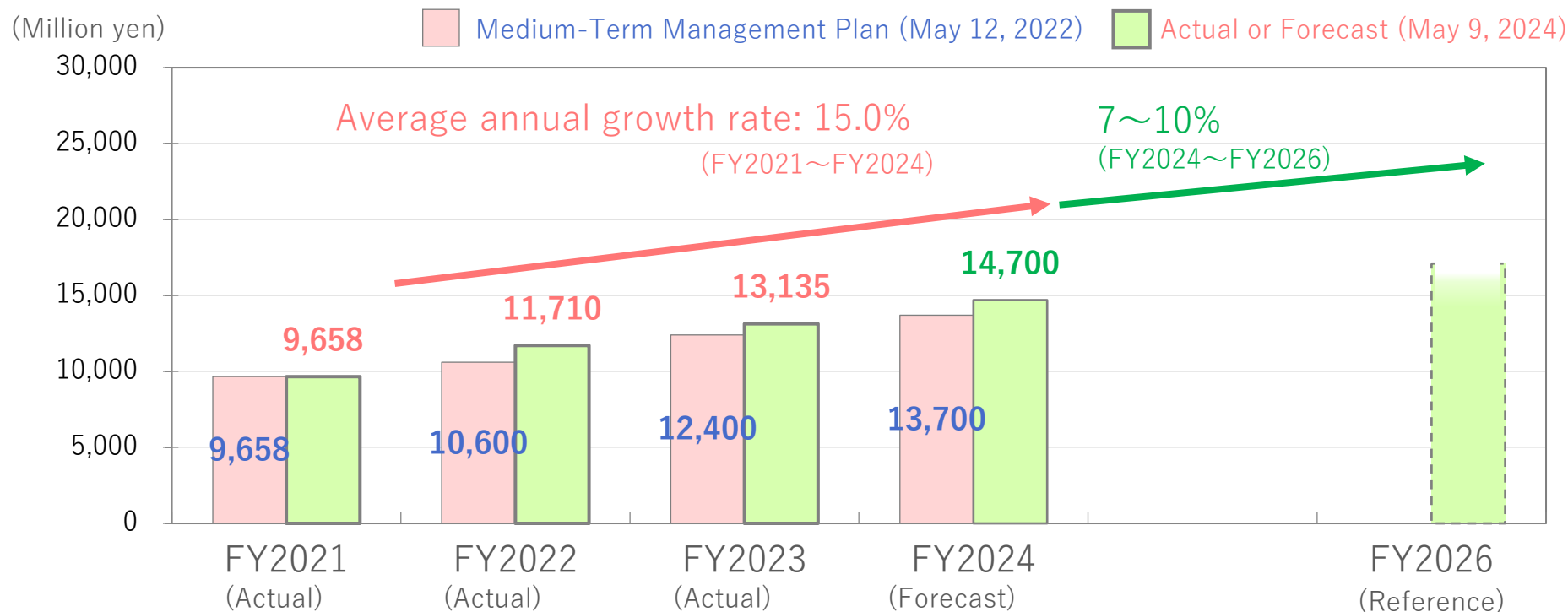
Commercialization in the semiconductor and in-vehicle fields

- Developing new products to enter new fields
- Expanding business in growing fields by strengthening competitiveness in production and technology



II -1-2. Industrial Structural Materials and Insulation Materials Segment

Plan and actual sales (forecast)



Water treatment materials for drinking and industrial water etc., continue strong growth due to an increase in demand. Furthermore, the production of aircraft materials has also been in an increasing trend due to normalization of the economy after Covid-19.

Also, the development of fuel cells and water electrolysis, etc. is gaining momentum to reduce environmental impact.

II -1-2. Industrial Structural Materials and Insulation Materials Segment

Developing unique products for further growth

To expand the scope of existing businesses

Business enhancement in the transportation infrastructure field

- In-vehicle: Make differentiation and enter markets using unique technologies
- Aircraft: Increase added value through the anticipation of users' needs

Revenue expansion in the water treatment field

- Creation of new demands by developing high-performance products

To generate new businesses opportunities

Commercialization in the new energy field

- Enter the hydrogen energy and superconductivity fields and promote the development for commercialization

Goals for FY 2024

Existing businesses

- Transportation infrastructure field: Develop light weight and environmentally sound products and obtain their user certification
- Water treatment field: Develop business with the group company network (expansion of regions and applications)

New businesses

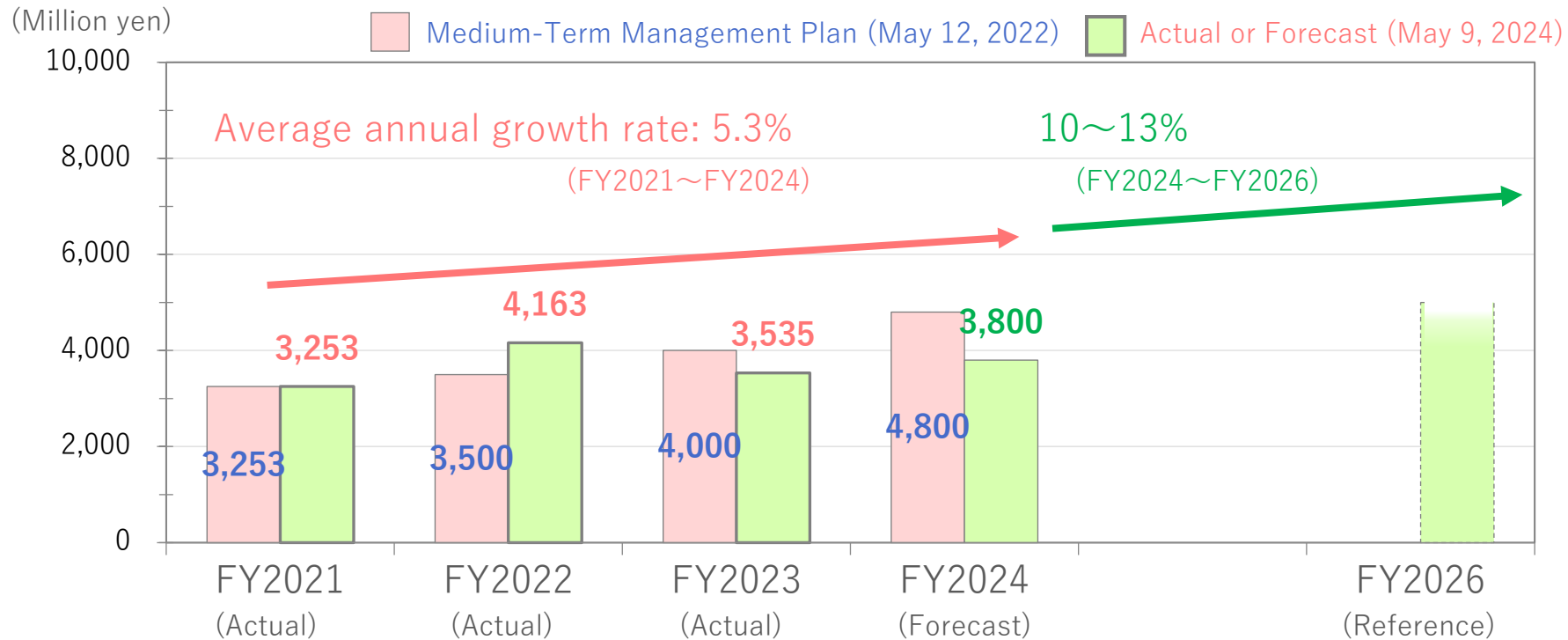
- New energy field: Expand production capacity, strengthen alliance and enter new fields



II -1-3. Display Materials Segment



Plan and actual sales (forecast)



Application of 3D-related materials in the medical field is expanding in China and other Asian region.

II -1-3. Display Materials Segment

Aiming for growth by enhancing unique technology

To expand the scope of existing businesses

Business enhancement in the medical high-definition display

- Expand the share of endoscopes and microscopes and attract overseas users
- Expand sales channels for telemedicine and robotic use
- Meet the needs for a higher definition

To generate new businesses opportunities

Business development in new fields

- Expand 3D filter application into non-medical fields

Goals for FY 2024

Existing businesses

- Expanding into Chinese market.
- Expanding sales channels for robotic applications.

New businesses

- Expanding into the industrial market sector.
- Making a full-scale entry into AR and VR markets.

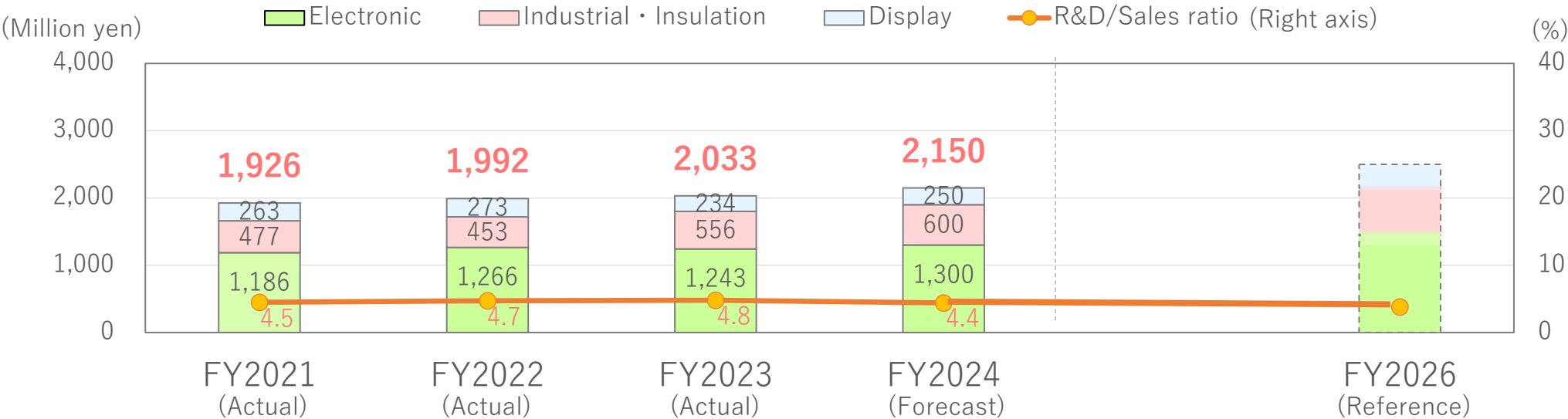


II -2. Research and Development Investment



R&D expenses

Increase R&D expense to promote development of differentiated products



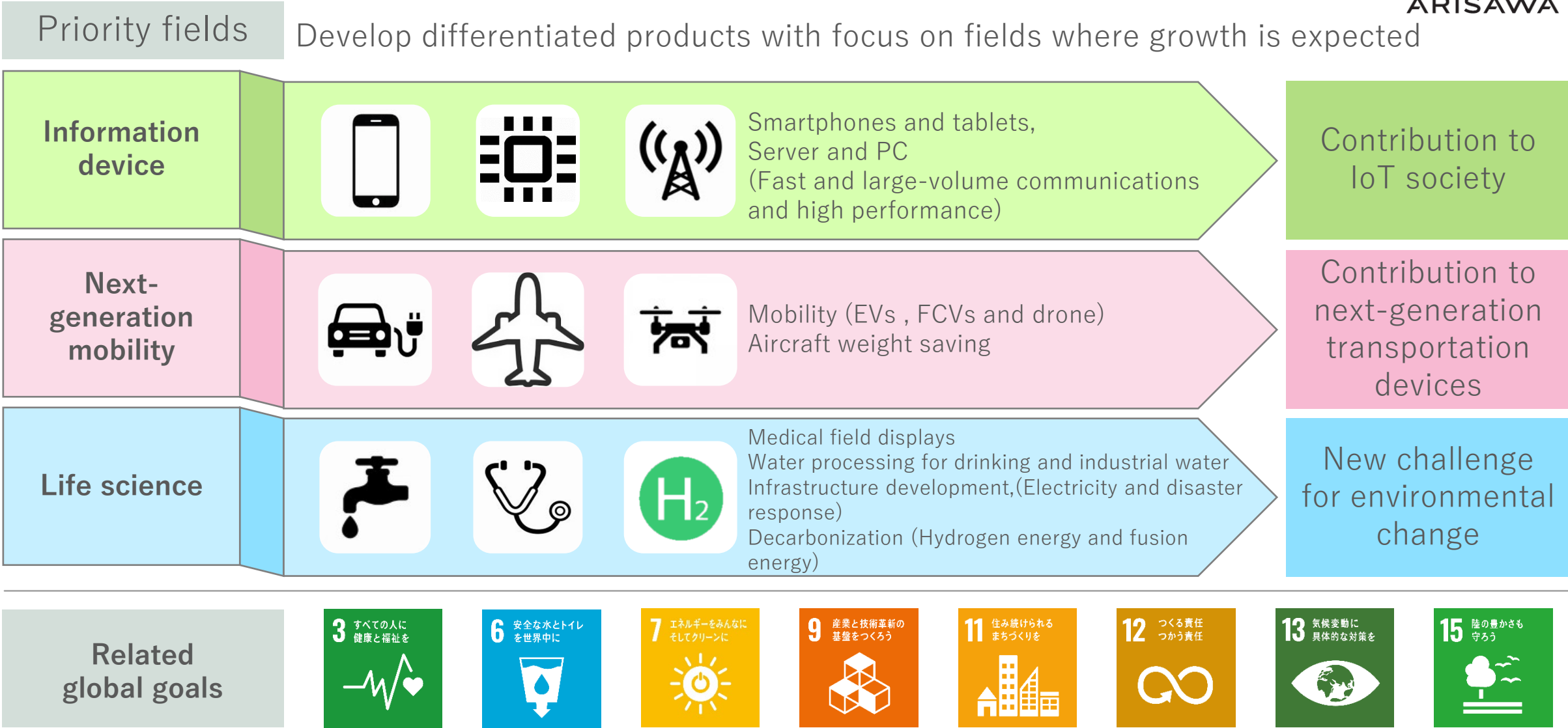
Priority products for development

Electronic materials	Industrial structural materials Electrical insulating materials	Display materials
<ul style="list-style-type: none">FPC materials for high speed transmissionFPC materials supporting high heat dissipation and large currentFPC materials for micro wiringInsulation film for semiconductor board	<ul style="list-style-type: none">Hydrogen energy-related materialsFuel Cell, Rechargeable battery-related materialsFor water treatment for drinking and industrial waterHigh-output motor-related materials	<ul style="list-style-type: none">For medical devicesFunctional film materials

II -3. Priority Fields for Differentiated Products

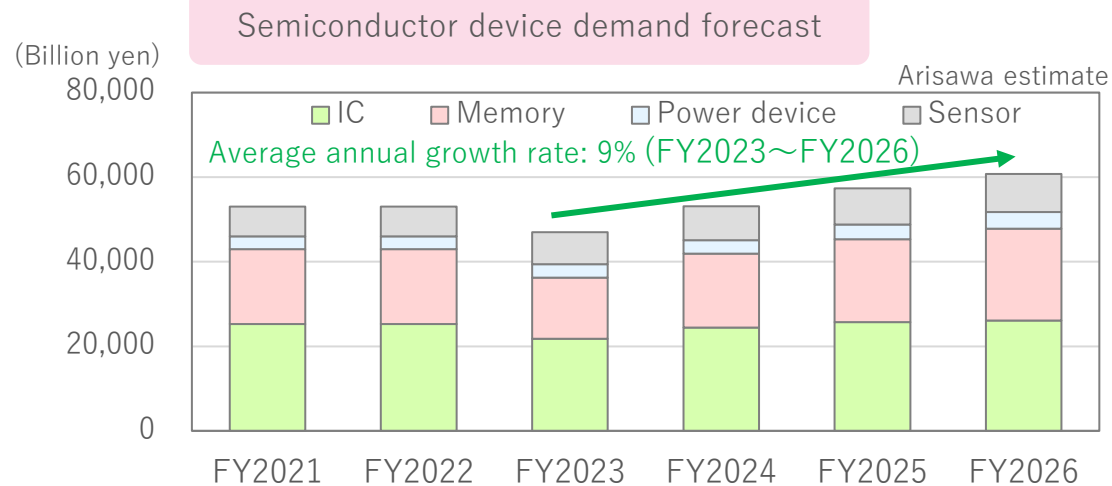
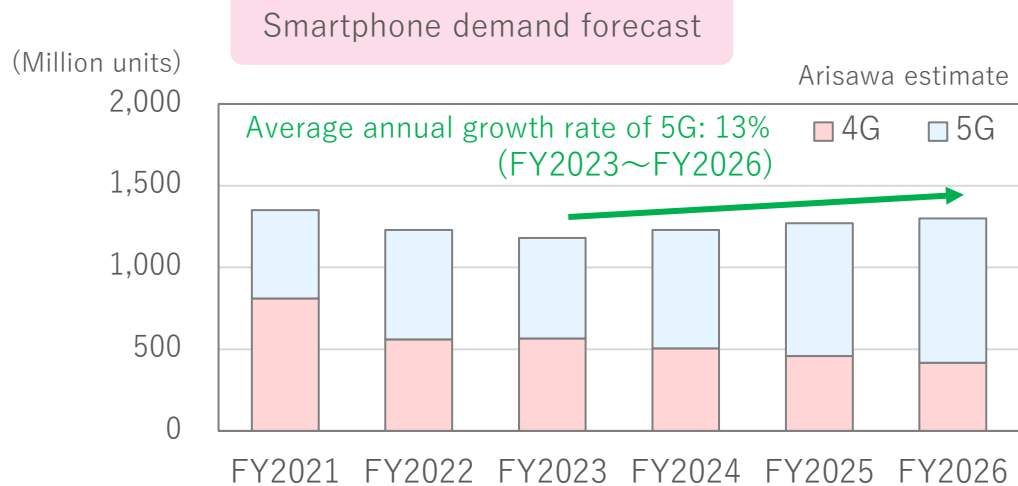


ARISAWA



II -3-1. Information Device Field (1)

Change in business environment



Fast and high-capacity communications

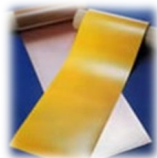
Increase in folderable type

Semiconductor performance increase

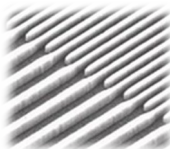
Diffusion of generative AI

Promotion of development of differentiated products

・ Demand for high-speed communication materials will increase with the spread of generative AI

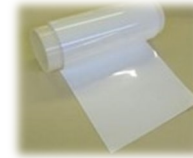


FPC materials for fast communication



FPC materials for micro wiring

Insulation film for semiconductor boards

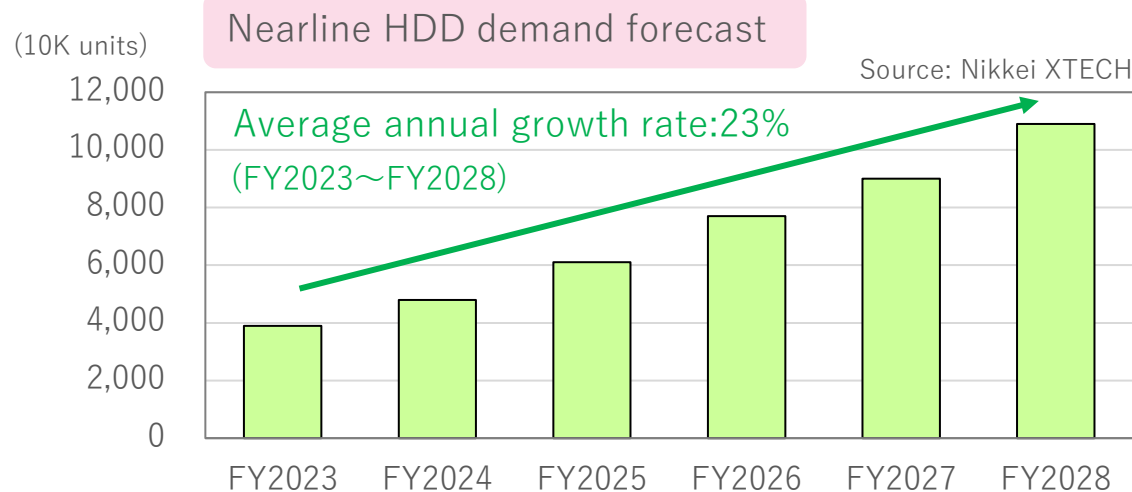
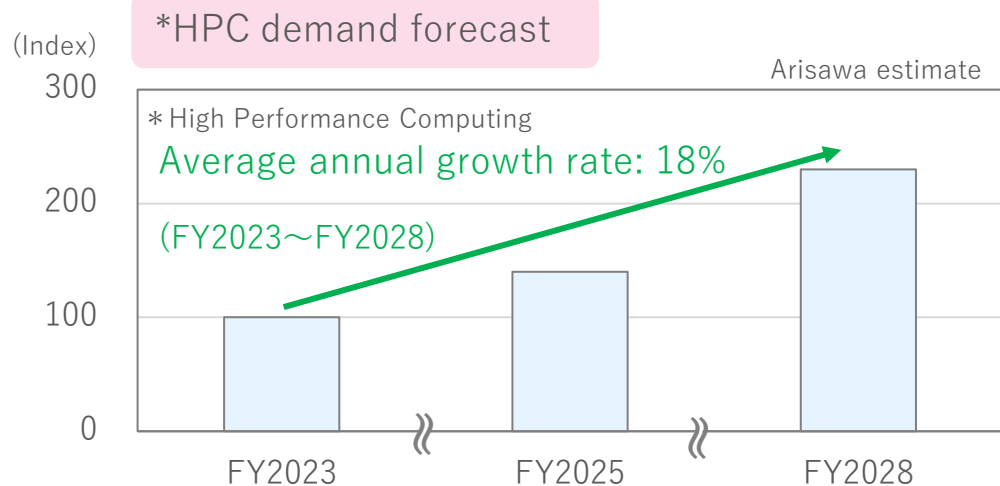


FPC materials supporting folderable type



Change in business environment

Evolution of network infrastructure and expansion of data center



Growth in demand for servers

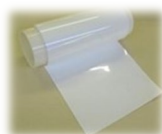
Diffusion of Generative AI

Growth in demand for storage

Higher HDD capacity

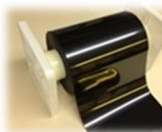
Expansion of our related businesses

・ Materials for semiconductor package boards and circuit board for HDD



Insulating films for semiconductor boards

Thin materials for circuit board



Photosensitive insulating film

Insulating materials with high heat dissipation



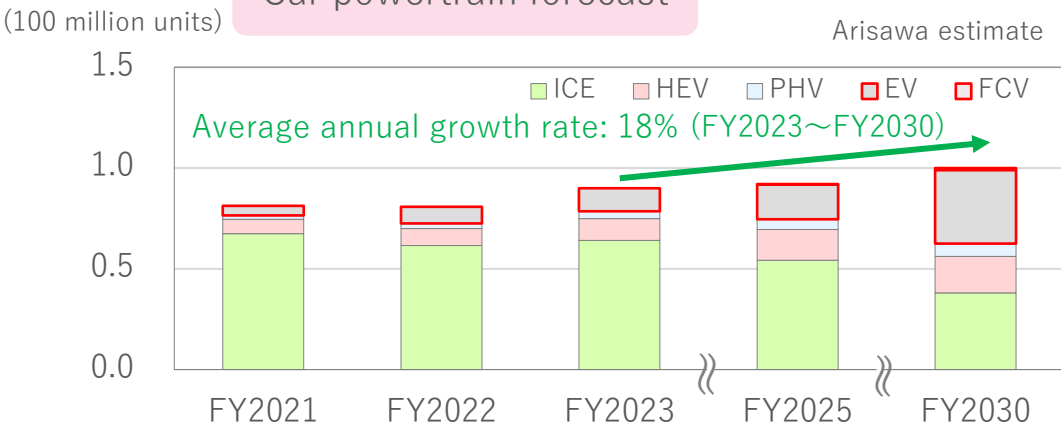
II -3-2. Next-generation Mobility Field



Change in business environment

Note: Markets indicated by red squares are where we can take advantage of our technologies

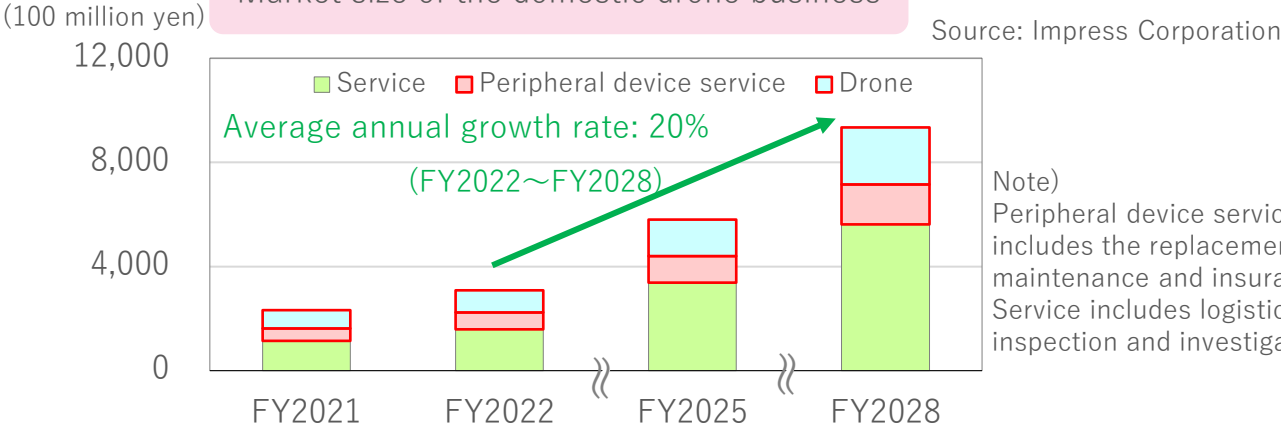
Car powertrain forecast



Electrification

Higher power

Market size of the domestic drone business



Note)
Peripheral device service includes the replacement battery, maintenance and insurance. Service includes logistics, inspection and investigation.

Lighter weight

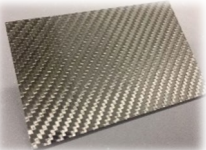
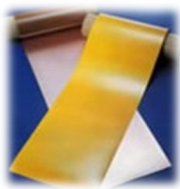
Promotion of development of differentiated products

・ The demand for higher output with the progress of electrification requires high heat dissipation and high current support.



Fuel cell, rechargeable battery related materials

FPC materials for high heat dissipation and high current support



Carbon fiber structural materials

High-output motor-related materials



Noticeable environment change

Fields where we can take advantage of our technologies



Water treatment



Medical



Green hydrogen

Promotion of development of differentiated products

・Water treatment materials are expected to expand applications. Hydrogen energy is also expected to expand use from mobility applications.



Water treatment materials for drinking and industrial water

Medical devise-related materials



Reinforcing materials for infrastructure equipment

Hydrogen energy-related materials



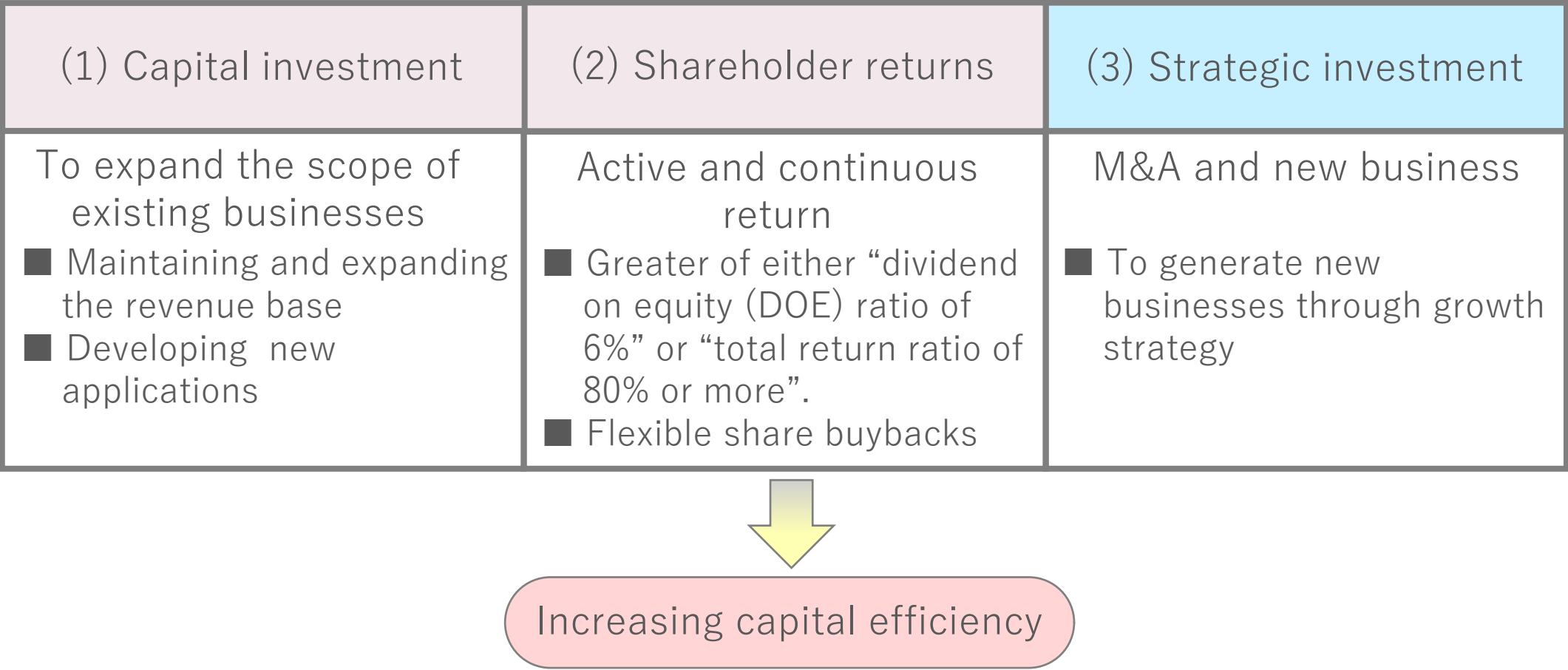
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III. Financial Strategy



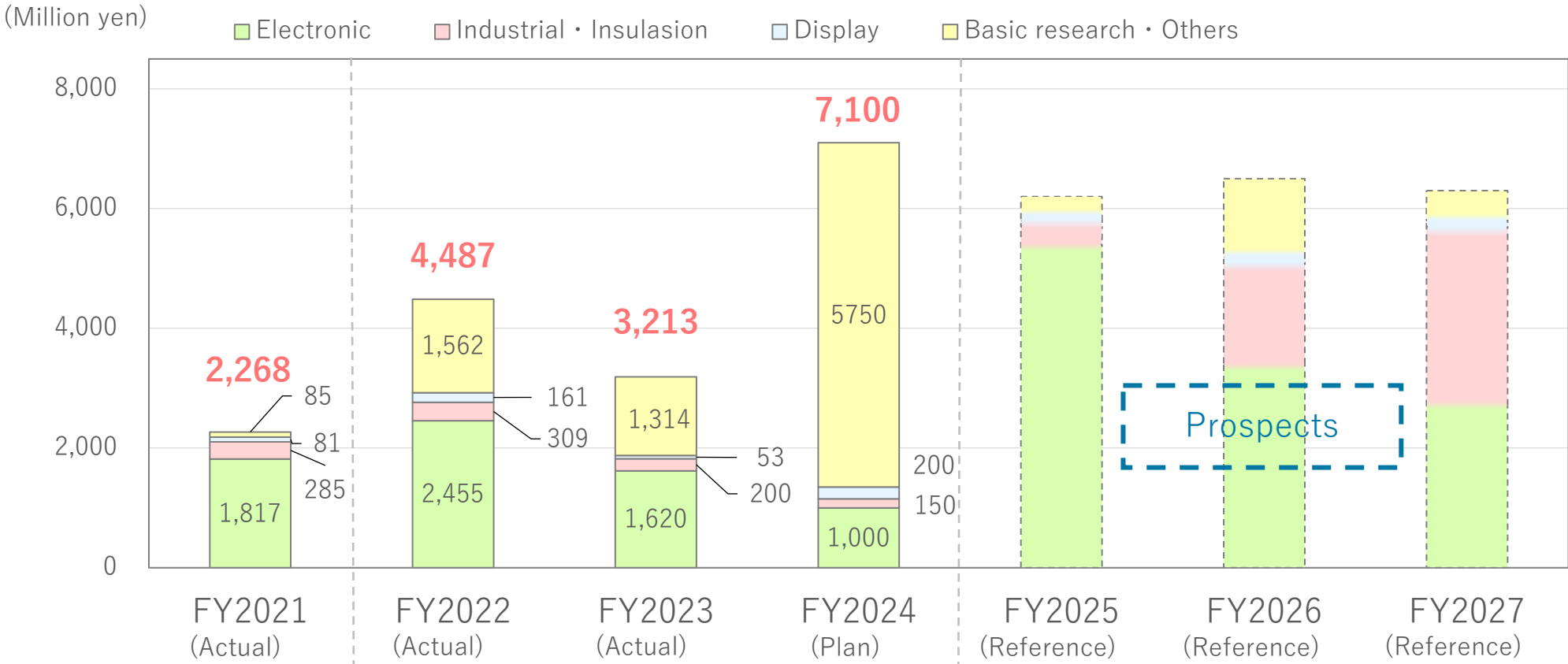
We improve capital efficiency by actively and continuously returning surplus to shareholders while managing cash flow effectively and converting non-business assets to business assets.



III-1-1. Capital Investment (by segment)



Capital investment to expand existing business and promote development



- From FY2025 onward,
- Electronic materials: Planning investments to increase capacity.
 - Industrial structural and electrical insulating materials: Planning to install machines for mass production of new business

Making R&D investments from a medium- to long-term perspective from FY2022 to FY2024



Planning to increase capacity and invest in new businesses from FY2025 onward.

III-1-2. Capital Investment (by purpose)

Progress (from FY2022 to FY2024)

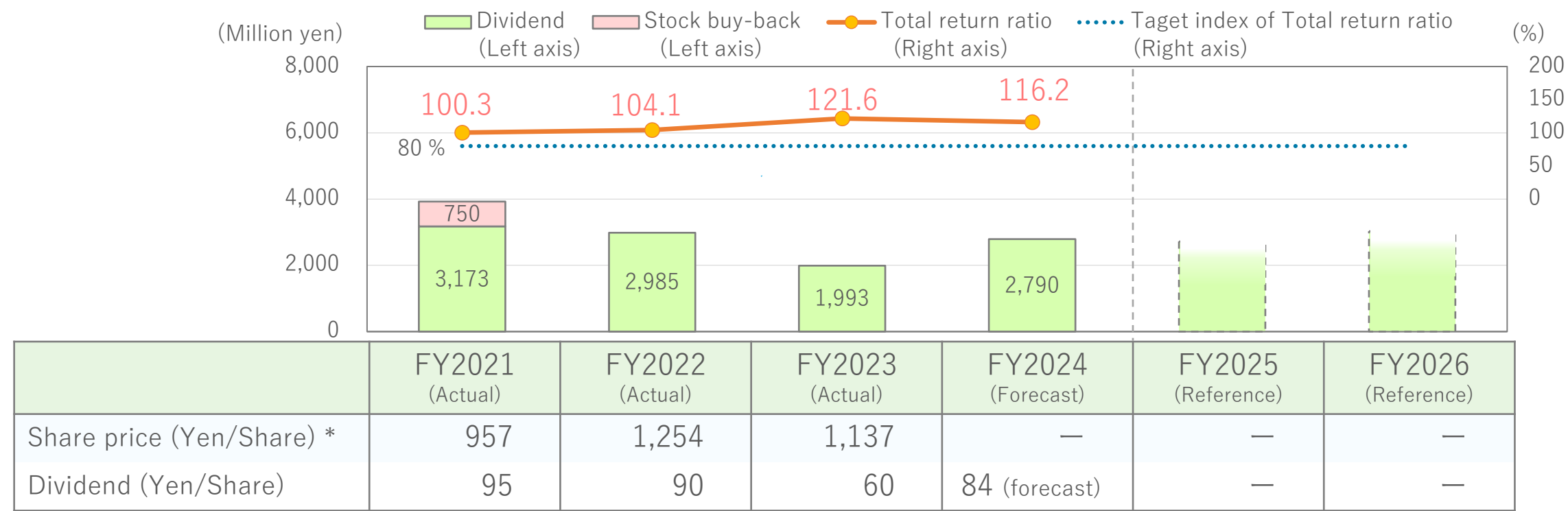
	Plans (as of May 12, 2023)	Result and estimation (As of May 9, 2024)
Development of new products	5,900 million yen <ul style="list-style-type: none">• Innovation Center (establishment of base for open innovation).• Small coating machines and test facilities (expansion of existing business and Creation of new businesses).	6,900 million yen ⇒ Under construction (Scheduled for completion in March 2025) ⇒ Running.
Increase in production capacity	5,600 million yen <ul style="list-style-type: none">• ThinFlex production facilities (expansion of sales in Chinese market).• Production facilities of insulation film for semiconductor board (expansion of existing business).	4,250 million yen ⇒ Installed ⇒ Postponed. Term of installation is under study.
Maintenance of buildings and equipment	2,700 million yen	2,850 million yen
Improvement of production processes	900 million yen <ul style="list-style-type: none">• Waste heat recovery system and onsite solar power generation (promotion of carbon neutrality).• Production management system and security measures (promotion of Digital Transformation).	800 million yen ⇒ Sequentially Installing. ⇒ Preparing for operation of production management system.

Note: Amounts of maintenance of buildings and equipment were included in 8,100 million yen of the increase in production capacity and 1,100 million yen of the improvement of production processes in the medium-term management plan as of May 12, 2023. Therefore, those are separately listed from this issue.

Change in shareholder return policy from FY2024

・Greater of either “DOE ratio of 6%” or “total return ratio of 80% or more”

We set “Total return ratio: 80% or more” and implemented shareholder return actively until FY2023. On the other hand, the shareholder returns have been unstable because we are sensitive to changes in business condition. Therefore, we decided to introduce a dividend from the fiscal year ending March 31, 2025, in which the greater of either “dividend on equity (DOE) ratio of 6%”, which is a stability-oriented dividend, or “total return ratio of 80% or more”, will be returned to shareholders. (Adaptation period: until when the equity ratio of around 50% is achieved.)



* Closing price at the end of period

III-3. Strategic Investment

M & A

Narrow down target and make capital investment in flexible manner, while making effective use of cash reserves.

Arisawa Innovation Center

With eyes on the next 100 years, we introduced a design that stimulates more communication throughout the company and make our Innovation Center aims to be a “base for open innovation” where unprecedented new value is created through the integration and co-creation of our technologies with other companies and research institutes. This is where people and ideas come and go.



Exterior perspective drawing

Scheduled for completion in March 2025

- Three-story building
- Design which takes energy-saving into consideration with earth thermal, contemporary snow room, waste heat A/C, etc.

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IV. ESG Strategy

IV-1. Materiality to be tackled

We set KGIs (key goal indicators) to achieve in each materiality to pursue sustainable growth

Materiality	KGI (Key Goal Indicator)	Promising global goals
Contribution to decarbonized society	<ul style="list-style-type: none"> - Achieve carbon neutrality by 2030 - Promote energy and resource saving - Replace with renewable energy - Offer low environmental load materials 	<div>7 エネルギーをみんなに そしてクリーンに</div> <div>13 気候変動に 具体的な対策を</div>
Development of diversified human resources and improvement in job satisfaction	<ul style="list-style-type: none"> - Develop next-generation human resources - Be a company where all employees can work lively 	<div>3 すべての人に 健康と福祉を</div> <div>5 ジェンダー平等を 実現しよう</div> <div>8 働きがいも 経済成長も</div> <div>10 人や国の不平等 をなくそう</div>
Promotion of circular economy	<ul style="list-style-type: none"> - Reduce emissions - Establish sustainable supply chain 	<div>6 安全な水とトイレ を世界中に</div> <div>8 働きがいも 経済成長も</div> <div>9 産業と技術革新の 基盤をつくろう</div> <div>11 住み続けられる まちづくりを</div> <div>12 つくる責任 つかう責任</div> <div>14 海の豊かさを 守ろう</div> <div>15 陸の豊かさも 守ろう</div> <div>17 パートナシップで 目標を達成しよう</div>
Enhancement of governance	<ul style="list-style-type: none"> - Be an organization with a strong sense of ethics - Build an organizational structure with an open-door policy 	<div>10 人や国の不平等 をなくそう</div> <div>11 住み続けられる まちづくりを</div> <div>16 平和と公正を すべての人に</div>

IV-2. Carbon Neutral Initiatives

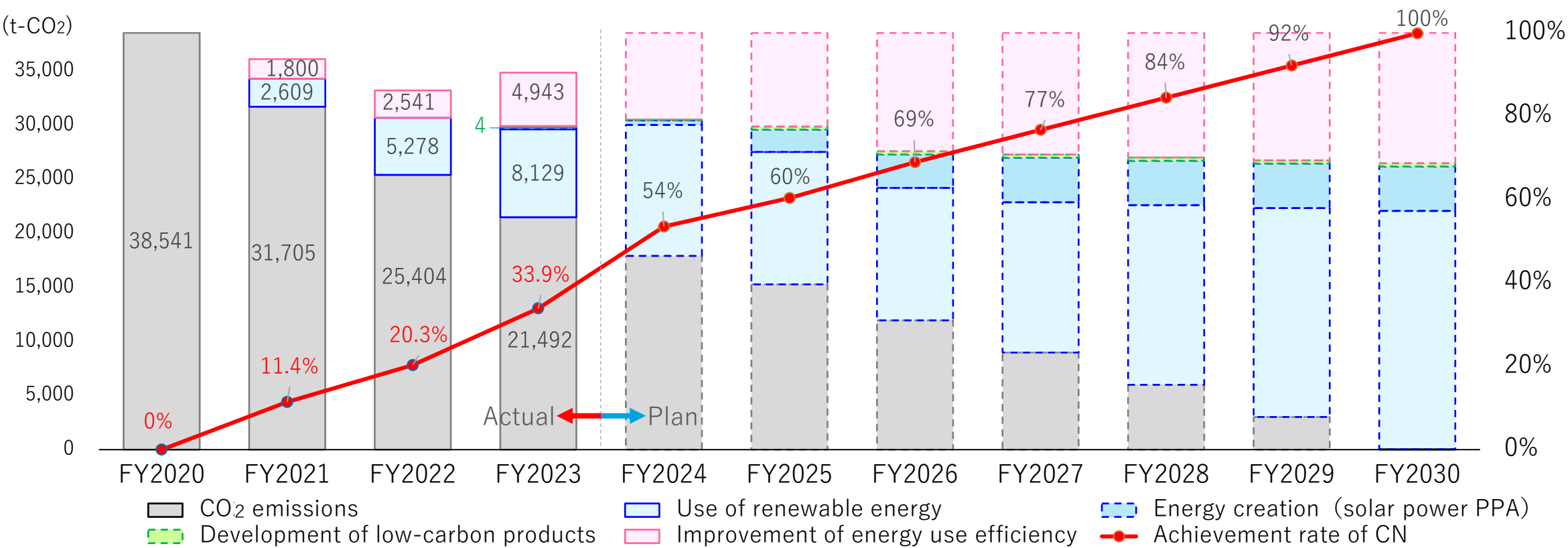


Target: Achieve carbon neutrality by FY2030 *

➡ Progressing as planned
(Actual result 33.9% vs. plan of 32% in FY2023)

* Target: CO₂ direct emissions (Scope 1) and indirect emission (Scope 2) (Announced on Jun 16, 2021)

Our initiatives: use of renewable energy, improvement of energy use efficiency, energy creation (energy storage), and development of low-carbon products. (started to market in FY2023 ·· reduction of 4t-CO₂)



Achievement rate of CN (carbon neutrality) = (Total of renewable energy, energy creation, low-carbon products, and energy utilization efficiency) / CO₂ emissions in 2020

IV-3. Contribution to Society Through Development



Select themes which influence customers, society and environment and aim for contribution to society through our business.

Goals for contribution to society	Initiatives to climate change	Prosperous life for all at all ages	Resource circulation and efficiency
Important themes and our contribution story	<p>Renewable and decarbonized energy</p>  <p>Contribute to decarbonized society by providing materials supporting FCV, EV, solar and wind power generation, hydrogen energy field.</p>	<p>Safety and life science</p>  <p>Contribute to healthy lives and promote well-being for all at all ages by providing materials supporting self-driving, water treatment and medical field.</p>	<p>Energy saving and resource saving</p>  <p>Contribute to energy and resource conservation by using biomass and recycled raw materials, reducing production energy, and providing lightweight materials for mobility applications.</p>
Related global goals	<div><div><p>3 すべての人に健康と福祉を</p></div><div><p>6 安全な水とトイレを世界中に</p></div><div><p>7 エネルギーをみんなにそしてクリーンに</p></div><div><p>9 産業と技術革新の基盤をつくろう</p></div><div><p>11 住み続けられるまちづくりを</p></div><div><p>12 つくる責任つかう責任</p></div><div><p>13 気候変動に具体的な対策を</p></div><div><p>15 陸の豊かさも守ろう</p></div></div>		

IV-4. Promotion of Human Capital Management

Development of diverse human resources

Human Capital Subcommittee was established in FY2023 → Further promotion of human capital management

- Ensuring diversity (active role of female employee, persons with disabilities, and foreigners)
 - ... Training for female employees and male managers by outside instructors and outside directors
- Fair evaluation and treatment (ensuring equal opportunities and meritocracy) ... Expansion of eligibility for regular transfer applicants
- Promote revitalization of human resources through training programs ... Expansion of training menu and introduction of in-house internships
- Promote 15% culture system ... Holding workshops to raise innovation awareness, various educational and training sessions
- Fostering a shareholder perspective ... Stock compensation grants to employees

Creation of pleasant working environment

- Promote employees taking childcare leave and nursing care leave
 - ... Confirmation of intent and briefing for subjects and supervisor
- Promote employees taking paid leave
 - ... Set recommended dates for paid leave (e.g., before and after long holiday), and provide individual information to those eligible for refresher leave
- Maintain good working conditions and support health maintenance and enhancement
 - ... Promote specific medical checkups and specific insurance guidance, and improve menu of employee cafeteria

	FY2021 (Actual)	FY2022(Actual)	FY2023 (Actual)	FY2024 (Target)
Ratio of female employees in managerial positions	12.5%	10.6%	14.4%	20.0%
Ratio of mid-career employees in managerial positions	68.8%	70.5%	69.4%	70.0%
Ratio of gender wage gaps between men and women	77.6%	80.5%	85.9%	85.0%
Ratio of male employees taking childcare leave	29.4%	42.1%	38.1%	60.0%
Percentage of annual paid leave taken	57.2%	65.6%	67.0%	75.0%

IV-5. Promotion of Circular Economy and Harmonious Coexistence with Society

Establishment of sustainable supply chain and reduction of emissions

Engage in CSR activities with suppliers

- Inform suppliers of our CSR Procurement Policy and follow up with them based on questionnaires
 - Conduct questionnaires to half of raw material suppliers
 - Evaluate responses from suppliers (identify risks) and request improvements from suppliers with low evaluation scores
- Disuse hazardous chemical substances
- Achieve zero emission by 2050

Harmonious coexistence with society

Develop community-based social activities and enhance brand power

- Return 0.5% of net profit of parent company to society
 - Donations to academic institutions and schools
 - Donation to health promotion business
 - Noto Peninsula Earthquake Donation to Ishikawa prefecture and Joetsu city
- Become involved in social contribution activities
 - Utilization of Innovation Center
 - Cleanup of neighboring rivers
 - Art classes of local elementary schools using wastes
 - Provision of small electronic devices to welfare facility volunteer

IV-6-1. Corporate Governance

Work to improve governance system to enhance corporate value

Actions for reform (implemented)

Implemented each action, and proceeded to improve governance reforms

- Assessment of effectiveness of the board of directors by a third party organization
- Increase in outside director ratio ... 55.5%
- Ensuring of diversity including gender ... Ratio of female employees in managerial positions: 22.2%,
Involvement of directors with diverse expertise
- Introduction of performance-based director's remuneration
... Operating profit is adopted as the Key Performance Indicators and the rate of achievement of
CO₂ reduction targets is also taken into account.
- Establishment of voluntary nomination and compensation committee ... 3 times held in FY2023

Future enhancement points

Further enhance governance system and implement actions to stimulate the board of directors

- Expansion of discussion on management of group companies
- Enhancement of training for directors and corporate auditors

IV-6-2. History of Improving Corporate Governance

(Unit: person)

Fiscal year	Board of directors			Board of auditors		Corporate officers			Main steps
	Inside/ Male	Outside/ Male	Outside/ Female	Inside/ Male	Outside/ Male	Inside/ Male	Inside/ Female	(Served as directors)	
2015	5	2		1	2	11		5	• Issuance of corporate governance report
2016	5	2		1	2	11		5	• Self-assessment of the effectiveness of the board of directors
2017	5	2		1	2	12		5	
2018	5	2		1	2	12		5	
2019	4	2		1	2	11		4	• Non-renewal of the anti-takeover measures • Establishment of the Assignment and Remuneration Advisory Committee (voluntary advisory body)
2020	4	3		1	2	11		4	• Assessment of the effectiveness of the Board of Directors by a third party organization • Introduction of exercising voting rights by an electromagnetic method
2021	4	4	1	1	2	10		4	• Change of stock awards for directors from Stock Option to Restricted Stock
2022	4	4	1	1	2	11	1	4	
2023	4	3	2	1	2	10	1	4	

This material is based on information available at the time of presentation, and contains forward-looking statements which involve risks and uncertainties that could cause actual results to differ materially from those presented in the forward-looking statements. Therefore, there is no assurance that any forward-looking statements in this material will be realized. Final investment decisions should be made at your discretion.

Please pay particular attention to the figures for the fiscal year ending March 31, 2026 and beyond. (Average annual growth rate in the page 3, 5, 7, and 9, reference value in page 11, 18, and 20, market forecast of Arisawa estimate in page 13, 14 and 15 etc.)