

Overview of Financial Results  
for First Six Months of Fiscal Year 2023 (ending March 31, 2024)  
Briefing materials

**DNP**

未来のあたりまえをつくる。

November 15, 2023

Dai Nippon Printing, Co., Ltd.

1. Overview of Financial Results  
for First Six Months of Fiscal Year 2023 (ending March 31, 2024)

# [Overview of Financial Results for First Six Months of FY2023]



(Unit: ¥billions)

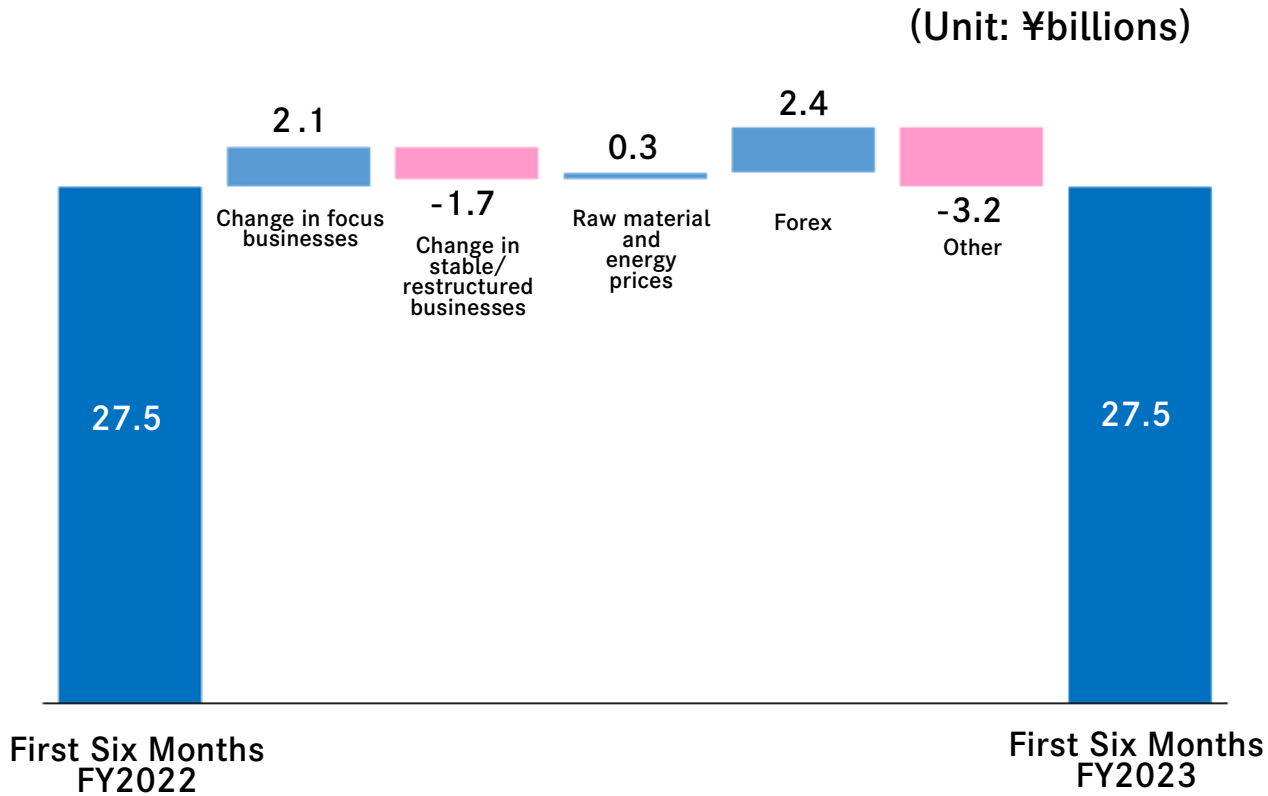
	First Six Months FY2022	First Six Months FY2023	Year-on-year Change	Earnings Forecast for FY2023	Rate of progress
<b>Sales</b>	668.4	693.7	+3.8%	1,410.0	49.2%
<b>Operating Income</b>	27.5	27.5	-0.2%	67.0	41.1%
<b>Ordinary Income</b>	36.7	37.4	+2.1%	78.0	48.0%
<b>Net Income</b> <small>Attributable to Parent Company Shareholders</small>	27.9	76.2	+172.9%	88.0	86.6%
<b>Capital Expenditures</b>	23.7	29.2	+23.4%	76.0	38.5%
<b>R&amp;D Expenditures</b>	16.2	17.7	+9.4%	34.0	52.3%
<b>Depreciation</b>	24.3	26.2	+8.0%	54.0	48.7%

## Overview

- We accelerated creation of new value, primarily in focus business areas, resulting in net sales growing 3.8% year on year
- The Digital Interfaces and other focus businesses began to perform well from the beginning of the first half, and we succeeded in maintaining operating income at the previous-year level
- Due to higher profits at affiliates accounted for using the equity method, ordinary income rose year on year

# [Overview of Financial Results for First Six Months of FY2023]

## Change in Operating Income



### Overview










- In focus businesses, despite the impact of the market deceleration in Semiconductors, demand for display components recovered and battery pouches for IT and automotive use also recorded growth
- Stable businesses saw strong demand, but were impacted by customer inventory corrections, etc. for some products
- In restructured businesses, the decline in the publishing market continued, and demand for construction materials was also weak
- The accelerating depreciation of the yen also contributed to the positive impact of forex

# [Overview of Financial Results for First Six Months of FY2023]

## Overview of Focus and Stable Businesses

**DNP**

(Unit: ¥billions)

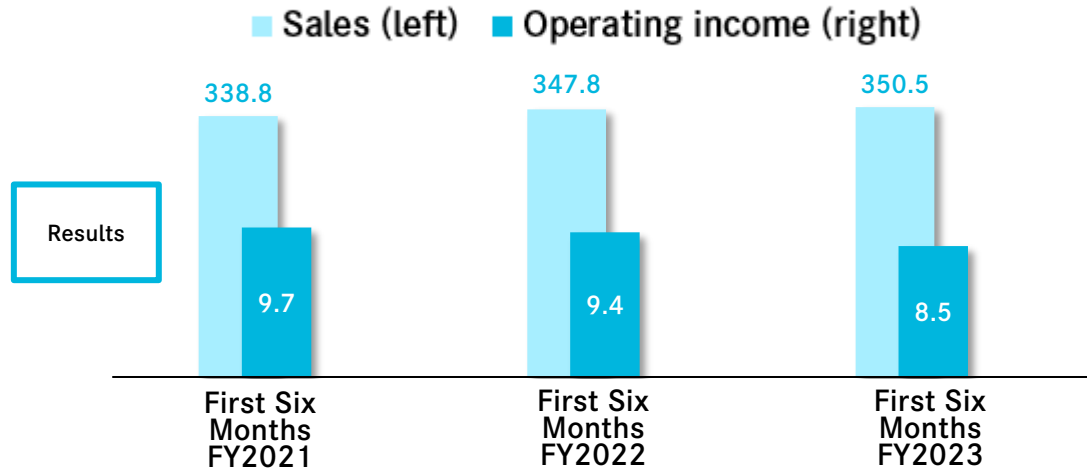
		First Six Months FY2022	First Six Months FY2023	Overview (Arrow indicates sales relative to previous year)		
Smart Communication	Segment Sales	347.8	350.5	Imaging communication		Strong performance from materials for printing photographs, primarily in European and Asian markets
	Segment Operating Income	9.4	8.5	Secure information		In addition to contribution from large BPO project, dual interface cards* grew in the IC card business
				Content & XR communication		Strengthened XR communication business by making Hacosco Inc., a group company
Life and Healthcare	Segment Sales	217.1	231.7	Industrial high-performance materials		In addition to battery pouches growing for both automotive and IT equipment applications, photovoltaic module components also performed well
	Segment Operating Income	2.8	5.1	Mobility		Began selling exterior decorative materials in addition to interior decorative materials
				Medical & healthcare		Made CMIC CMO Co., Ltd. a group company in order to work together with a focus on integrated manufacturing from APIs to formulation, as well as high value-added pharmaceutical development
Electronics	Segment Sales	104.4	112.6	Optical film		Recorded increase after previous fiscal year's inventory corrections in the overall supply chain ran their course
	Segment Operating Income	25.7	25.0	Metal masks used for manufacturing organic OLED displays		Steady increases against the background of expanded adoption of OLEDs for smartphones
				Semiconductors		Lead frames, etc. for semiconductor packages decreased due to the impact of the market slowdown

\* Cards with two interfaces on one chip (contact and contactless)

# [Overview of Financial Results for First Six Months of FY2023] Results by Segment

(Unit: ¥billions) **DNP**

## Smart Communication



## Overview

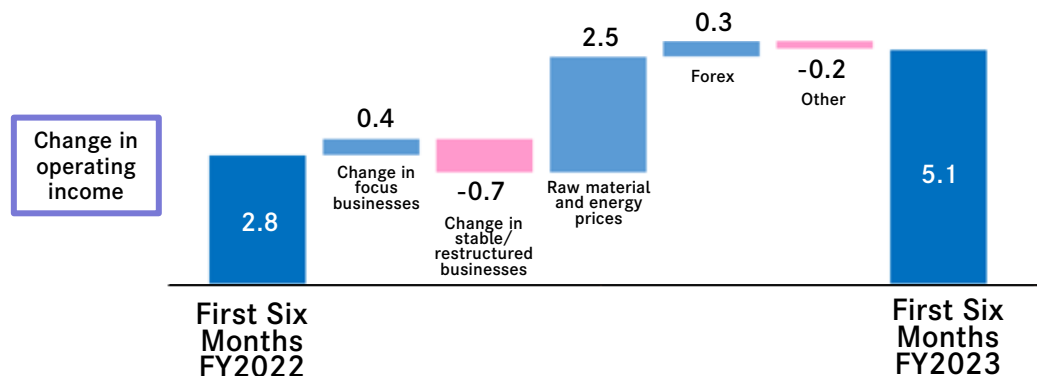
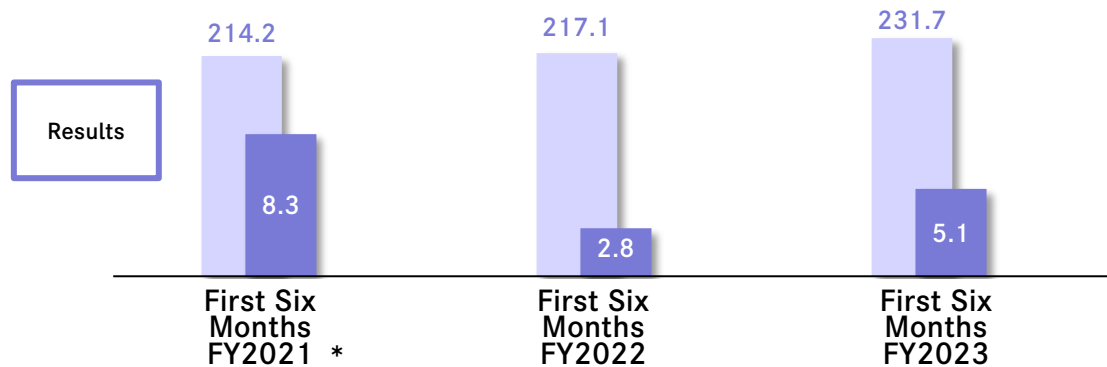
- In the stable businesses, secure information performed well
- Demand in imaging communication was also strong, but profits were affected by inventory corrections, etc. for some products
- In restructured businesses, the market for magazines and other paper media continue to contract

# [Overview of Financial Results for First Six Months of FY2023] Results by Segment

(Unit: ¥billions) **DNP**

## Life and Healthcare

■ Sales (left) ■ Operating income (right)



## Overview

- In focus businesses, despite functional films decreasing year on year, battery pouches recovered for both automotive and IT equipment applications
- In the Packaging and Living Spaces businesses, we focused on high value-added products and worked to reform the business portfolio
- CMIC CMO Co., Ltd. became a consolidated subsidiary in the first quarter of the current fiscal year

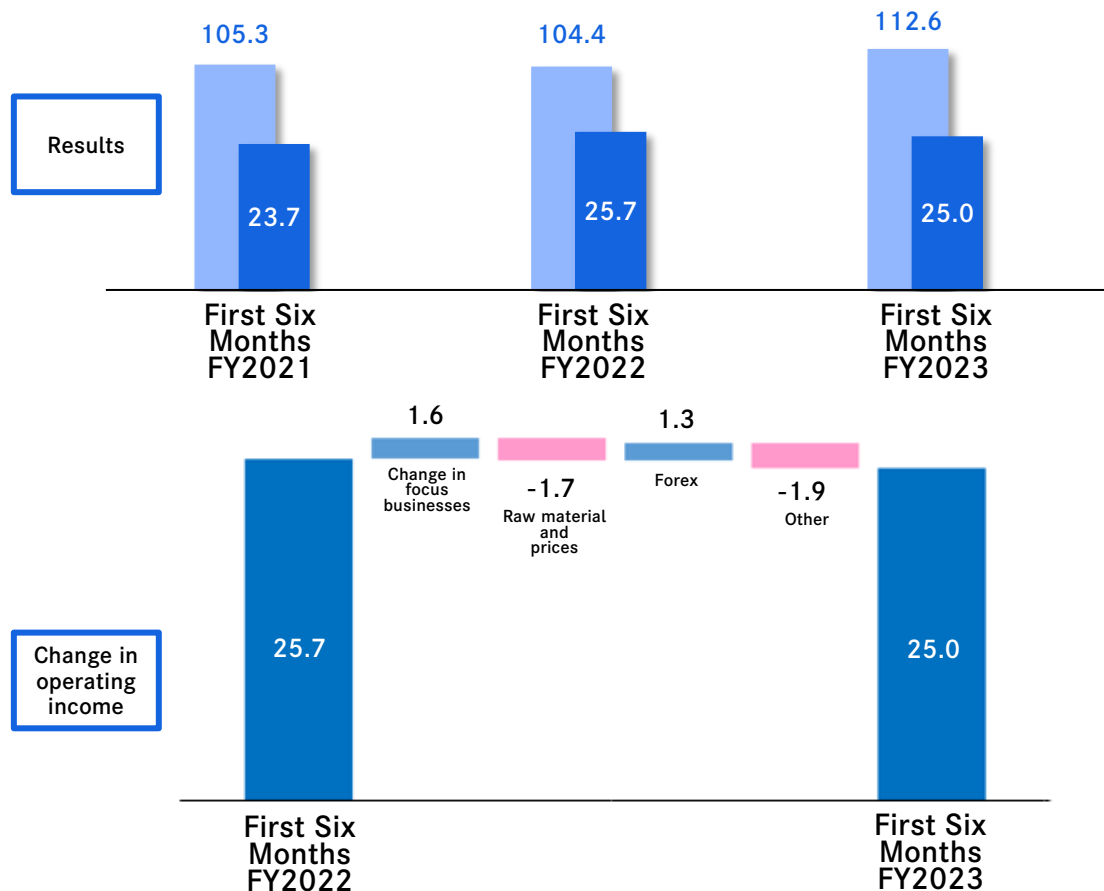
\*FY2021 sales and operating income for "Life and Healthcare" display the total of the former "Lifestyle and Industrial Supplies" and "Beverages"

# [Overview of Financial Results for First Six Months of FY2023] Results by Segment

(Unit: ¥billions) **DNP**

## Electronics

■ Sales (left) ■ Operating income (right)



## Overview

- Optical film increased due to the recovery in demand for display components
- Metal masks for manufacturing OLED displays were strong, following an increase in the adoption rate for smartphones
- Despite strength in photomasks for semiconductors, lead frames, etc. for semiconductor packages decreased



# [Overview of Financial Results for First Six Months of FY2023]

## Full-year Earnings Forecast

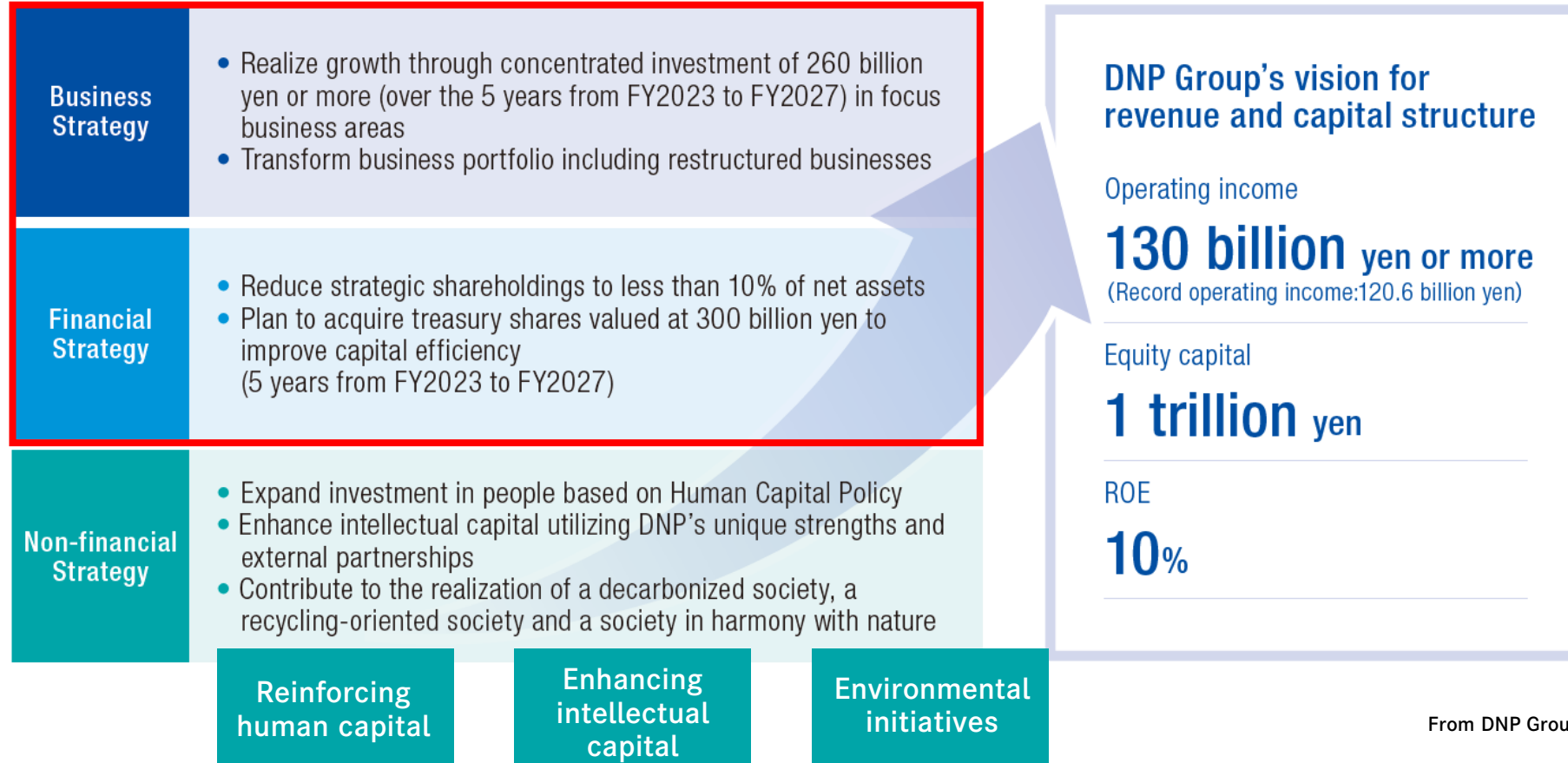
- Maintained operating income in the first half at previous-year level
- Expect growth in the third quarter and beyond, centered on digital interfaces and other focus businesses
- No change to our full-year FY2023 earnings forecast at this time

(Unit: ¥billions)

	First quarter		Second quarter		Third/Fourth quarters		Full year	
	FY2022	FY2023	FY2022	FY2023	FY2022	FY2023	FY2022	FY2023 earnings forecast
Sales	334.4	345.0	334.0	348.6	704.7	716.2	1,373.2	1,410.0
Operating Income	16.9	13.2	10.6	14.2	33.6	39.4	61.2	67.0
Ordinary Income	22.6	19.3	14.0	18.0	46.9	40.5	83.6	78.0
Net Income Attributable to Parent Company Shareholders	15.7	58.0	12.1	18.1	57.7	11.7	85.6	88.0
Change in operating income	-	-21.5%	-	+33.5%	-	+17.3%	-	+9.4%

## **2. Medium-term Management Plan Progress**

## Initiatives Aimed at Realization of the Vision



From DNP Group Integrated Report 2023 p.9

By implementing the above initiatives and also expanding disclosure especially on focus business areas, **we will expedite achieving a PBR of more than 1.0X**

# [Medium-term Management Plan - Business Strategy]

## Investment in Focus Business Areas, Etc.



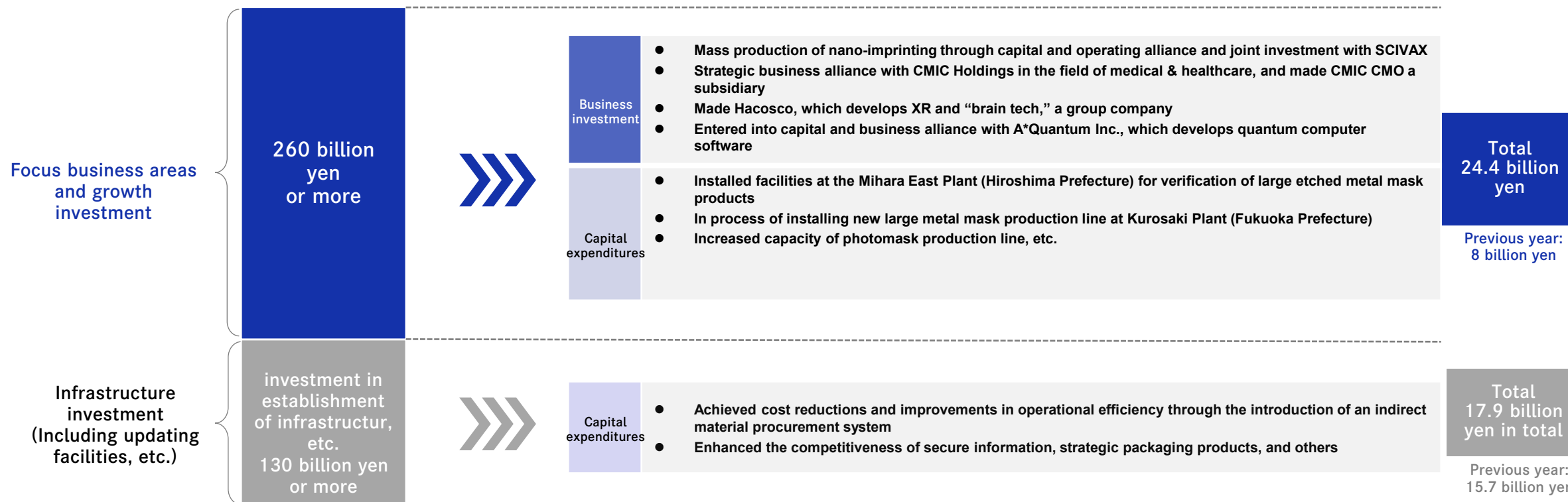
Growth investment and infrastructure development investment:

390 billion yen or more (cumulative amount for FY2023-FY2027)

Promote capital investment, global expansion and consideration of external alliances centered on focus business areas.

FY2023 to FY2027

Main items of investment in 1H FY2023



# [Medium-term Management Plan - Business Strategy] Refinement and Acceleration of Global Rollout of DNP's Unique Technology and Products

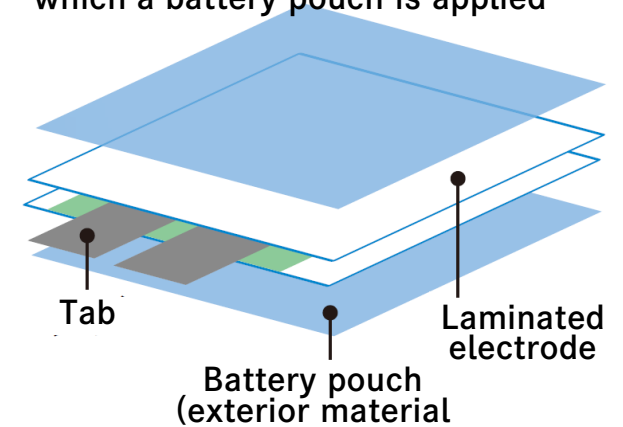


## [Lithium-ion battery pouches] Driving the expansion of the global pouch market as the industry leader



- We have secured 60-70% share over the global battery pouch market, and are driving the market forward. Particularly for large pouches used in automotive and other applications we have nearly 100% share. (Research by DNP, 2022)
- We have been developing battery pouches for more than 30 years, and our track record of reliability has won us high praise from many customers.

✔ Structure of a lithium-ion battery to which a battery pouch is applied



Bolster competitiveness by combining the **coating and lamination technologies** honed in packaging materials for products such as food and pharmaceuticals as well as an exhaustive range of patent applications, and through use of internally developed production facilities

### Product competitiveness: its source, and further enhancements

- [Production technology] Production equipment tailored to our proprietary processes is manufactured in-house
- [Product development]
  - Materials development: Development and manufacture of strategic materials through in-house design and alliances with materials manufacturers
  - Process development: Improving characteristics through the use of proprietary processes

### Further reinforce our strengths

- [Vs. competition] We have many comprehensive patents that discourage entry by other companies
- [Vs. customers] We will use our track record of adoptions by customers to further strengthen our relationship with global EV battery manufacturers  
We are promoting local production to address policies specific to various countries

### Advantages of pouch type

- Can be designed into low-profile shape with large surface area for outstanding radiant efficiency
- High degree of freedom with regard to shape
- Few vacant spaces compared to other methods, giving better volumetric energy density
- Easy to create multilayer construction (stacked structure) with superior reliability and safety.

(DNP research)

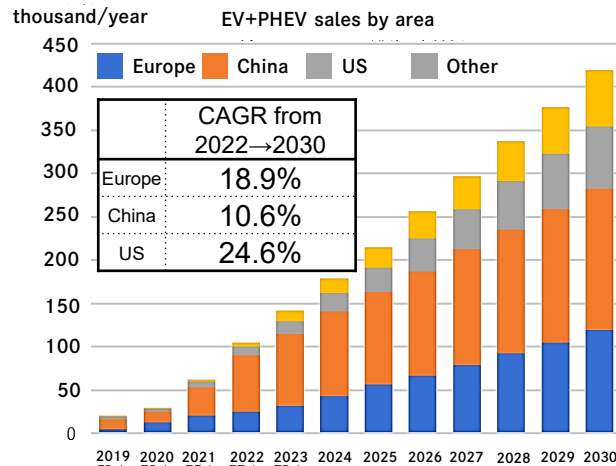
# [Medium-term Management Plan - Business Strategy] Growth Strategy Aimed at Maintaining Top Global Market Share



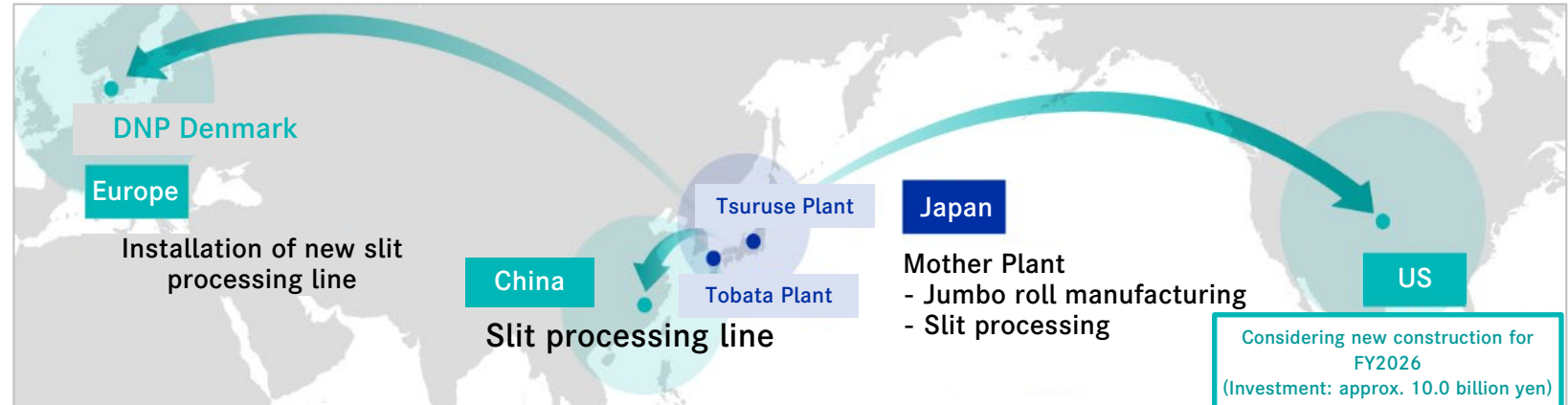
[Lithium-ion battery pouches] Europe: Installation of new slit processing line at DNP's Denmark Plant  
United States: Considering construction of plant

## Progress of shift to EVs in global market

Establishing a structure to swiftly address local customer needs in order to further enhance our global presence



- Environmental policies, laws and regulations in various countries expected to drive active investments in EVs and growth in sales volumes.
- In addition to the growth expected in Europe and China, the shift to EVs is expected to accelerate in the US as a result of preferential tax treatment for EVs established by the Inflation Reduction Act and the internalization of EV battery production by GM and Ford, resulting in significant expansion.



## Business strategy/investment plan

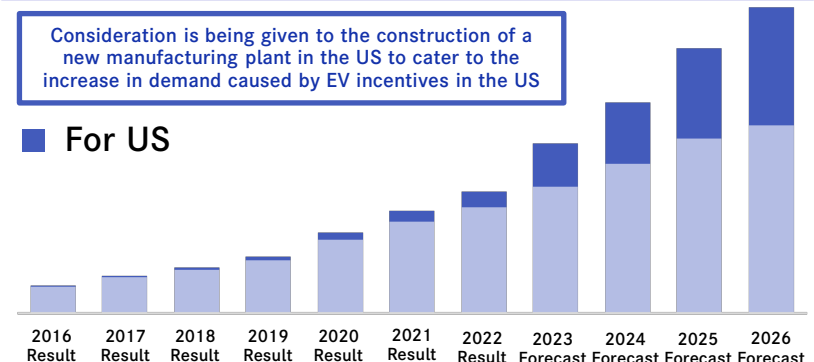
- Promote supply to appropriate regions in Europe and United States  
Post-process line in Europe (Denmark Plant) begins operation (in 2Q FY2023)  
United States (planning installation of new production line)  
Slit processing line (considering start of operations in FY2026)  
\*Also considering jumbo roll manufacturing

Aiming for 100 billion yen in sales by FY2025 for lithium-ion battery pouches overall

## Battery pouches business performance and targets (volume)

Consideration is being given to the construction of a new manufacturing plant in the US to cater to the increase in demand caused by EV incentives in the US

■ For US

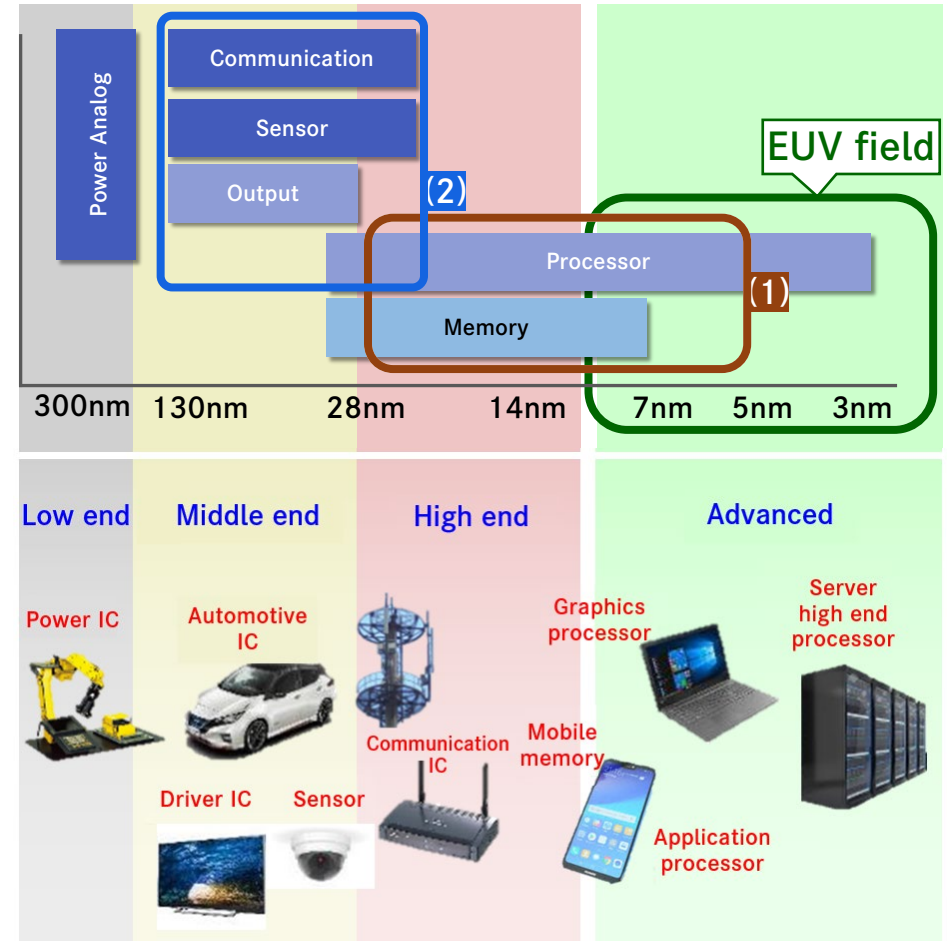
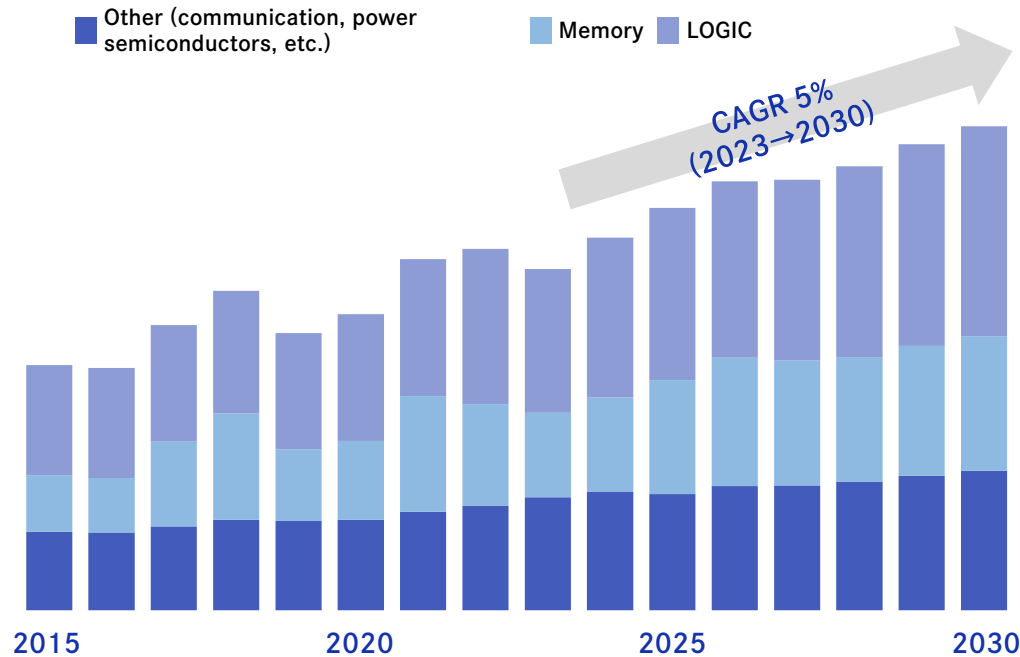


# [Medium-term Management Plan - Business Strategy] Semiconductor Business Strategy

## Global market outlook for semiconductors and technology node and applicable products

### Global market outlook for semiconductors

Source: Estimates by DNP based on various materials



## Capital Expenditures for Photomasks

■ Size of investment  
20 billion yen (FY2023 to FY2025)

■ Details/progress of main investment items

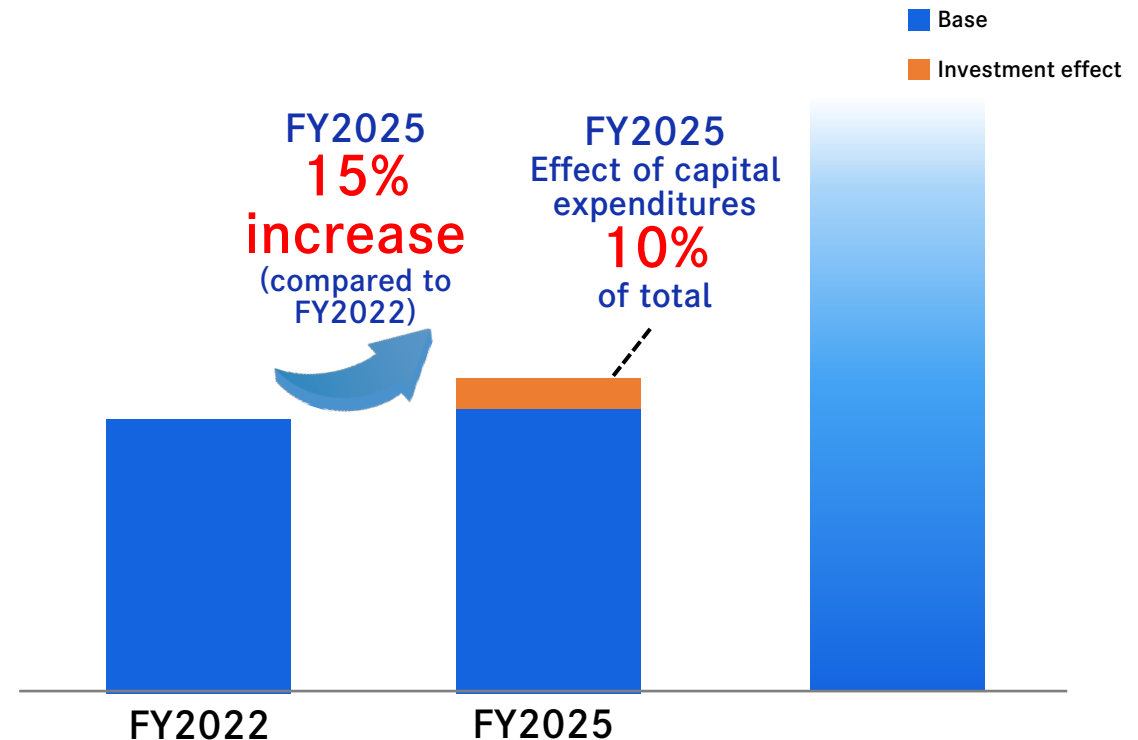
- (1) Increase number of multi-beam mask writers
  - Scheduled to begin operation in 2H FY2024
- (2) Expand production capacity for mid-range products
  - Scheduled to begin operation in stages, FY2023 to FY2025

■ Investment objective

- (1) Strengthen ability to address EUV/advanced fields
- (2) Enhance ability to address expanding demand for automotive applications, and semiconductor volume zone

### Sales Plan

Graph: Growth rate indexed against FY2022 as 100





# [Medium-term Management Plan - Business Strategy] TGV Glass Core Substrate for Next-generation Semiconductor Packages

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Awarded the grand prize in the electronic materials for semiconductors category at “Semiconductor of the Year 2023”

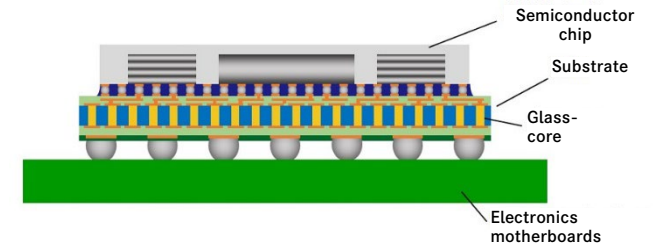
The “TGV Glass Core Substrate” developed by DNP uses glass as a replacement for the resin used in conventional substrates such as FC-BGA (Flip Chip-Ball Grid Array), with this high-density Through Glass Via (TGV) enabling the provision of semiconductor packages capable of even higher performance than was previously possible.

## Developmental backdrop

- As the volume of data being distributed rises dramatically in step with the advance of digital transformation (DX), the semiconductors that support our social infrastructure are being required to deliver even greater performance and higher reliability
- This has led to increased interest in next-generation semiconductor packages that enable higher processing speeds through the mounting of multiple semiconductors with different functions on the same substrate

## Features of glass core substrates

- A new manufacturing method is used to enhance the adhesion between glass and metal, which is difficult to achieve with conventional technology, resulting in finer pitch and high reliability
- With an aspect ratio of 9+, the adhesive qualities are sufficient to allow fine wiring
- It enables a high degree of design freedom with regard to warpage, rigidity and planarity, and the use of our panel manufacturing process allows it to be scaled up for larger packages

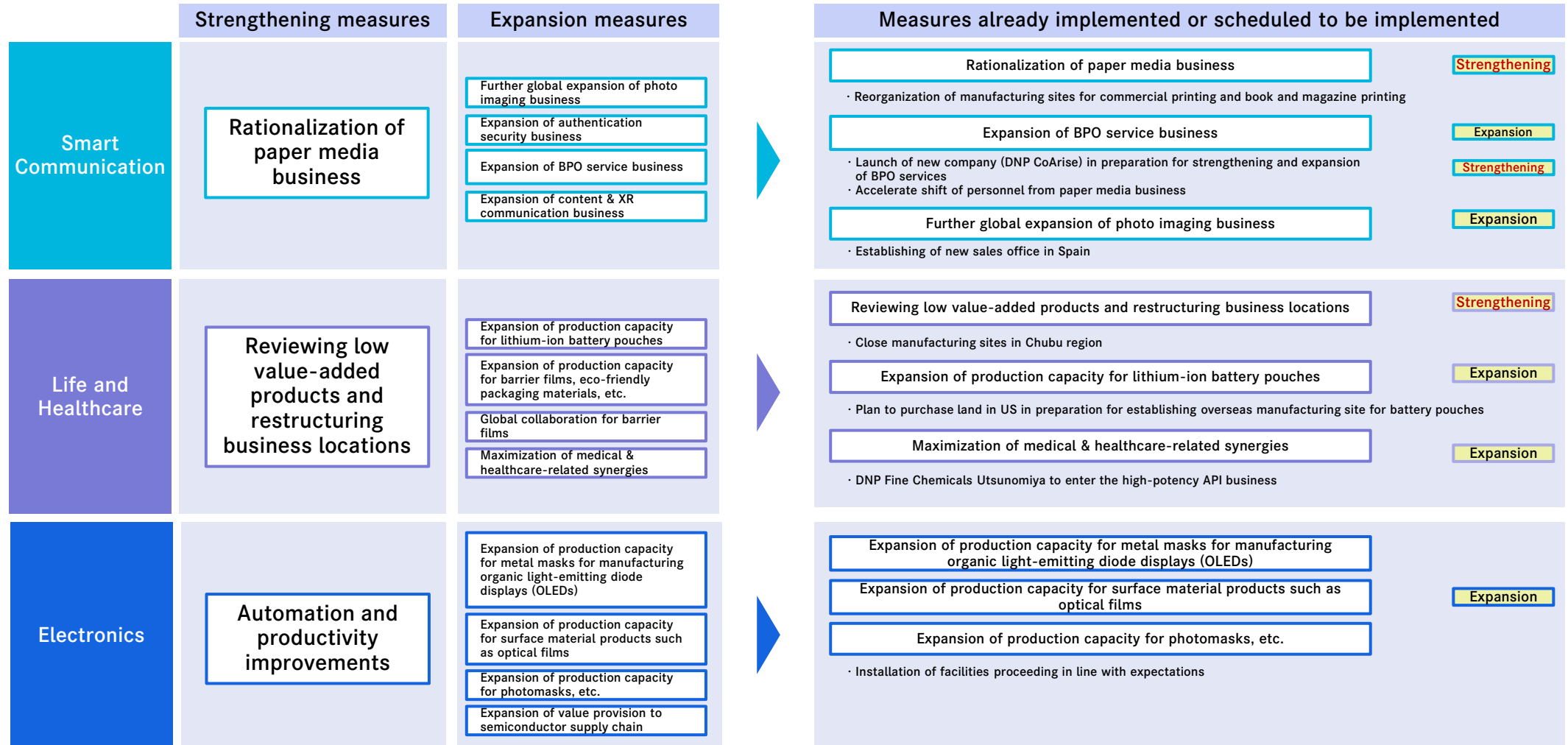


Sales target for FY2030:  
**30 billion yen**

# [Medium-term Management Plan - Business Strategy]

## Status of Business Structure Reform

Seek to rationalize locations and systems according to market trends and business size in all segments, and reallocate resources from contracting divisions to growth areas to continue to strengthen the business foundation for sustainable growth.



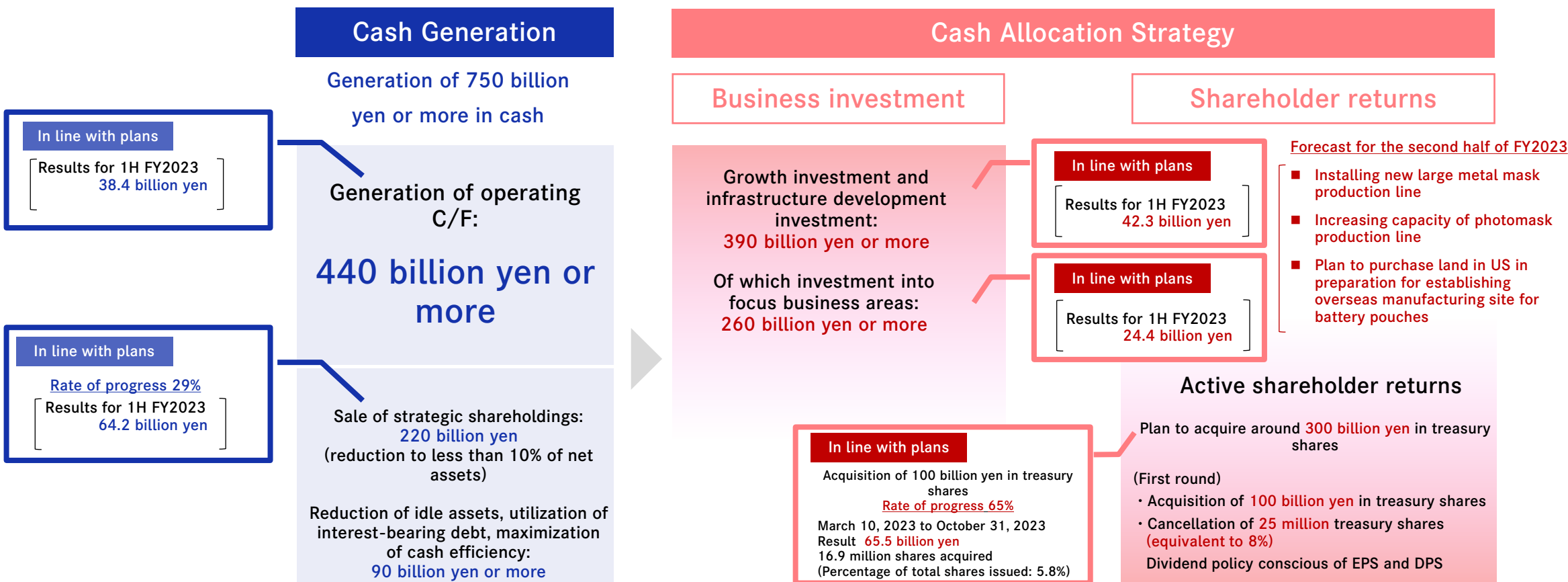
# [Medium-term Management Plan - Financial Strategy]

## Cash Allocation



### 5 years from FY2023 to FY2027\*

Appropriate allocation of cash generated to further business growth and shareholder returns



\*Year: Fiscal Year FY2023: ending March 31, 2024  
FY2027: ending March 31, 2028

# [Medium-term Management Plan - Financial Strategy]

## Sale of Strategic Shareholdings and Acquisition of Treasury Shares



### (1) Sale of Strategic Shareholdings

Relative to the plan of 220 billion yen over five years, as of September 30, 2023 we had sold 29% representing 64.2 billion yen in listed stocks



### (2) Acquisition of Treasury Shares

Relative to the plan of 300 billion yen over five years, we are in the process of acquiring 100 billion yen in treasury shares (acquisition period: March 10, 2023 to March 8, 2024)

As of October 31, 2023, we had acquired 65% representing 65.5 billion yen (16.9 million shares) of treasury shares



By March 8, 2024, we plan to acquire 100 billion yen in treasury shares

未来のあたりまえをつくる。

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## Disclaimer

The earnings forecasts, medium-term management targets, and other forward-looking statements contained in these materials represent DNP's judgement of the current outlook based on information available at the time of preparation, and involve potential risks and uncertainties.

Actual performance may therefore differ materially from these forward-looking statements due to changes in the various assumptions on which they are based.