Dai Nippon Printing Co., Ltd.

DNP Group IR-Day FY2024

July 11, 2024

Event Summary

[Company Name]	Dai Nippon Printing Co., Ltd.
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[Venue Size]	
[Participants]	
[Number of Speakers]	8

Yoshinari Kitajima	President
Mitsuru Tsuchiya	Senior Executive Corporate Officer
Toshiki Sugimoto	Senior Executive Corporate Officer, Medical & Healthcare
Nobuyuki Asaba	Senior Corporate Officer, Content & XR communication
Mitsuru Iida	Senior Corporate Officer, High Performance Materials Operations
Minoru Nakanishi	Corporate Officer, Fine Device Operations
Nobuyuki Tomizawa	Corporate Officer, Optical Electronics Operations
Naoki Wakabayashi	General Manager, IR and Public Relations Division

Presentation

Wakabayashi: Since it is now the scheduled time, we will begin the DNP Group IR-Day. I am Wakabayashi from the IR and Public Relations Division, and I will be your host today. Thank you for joining us.

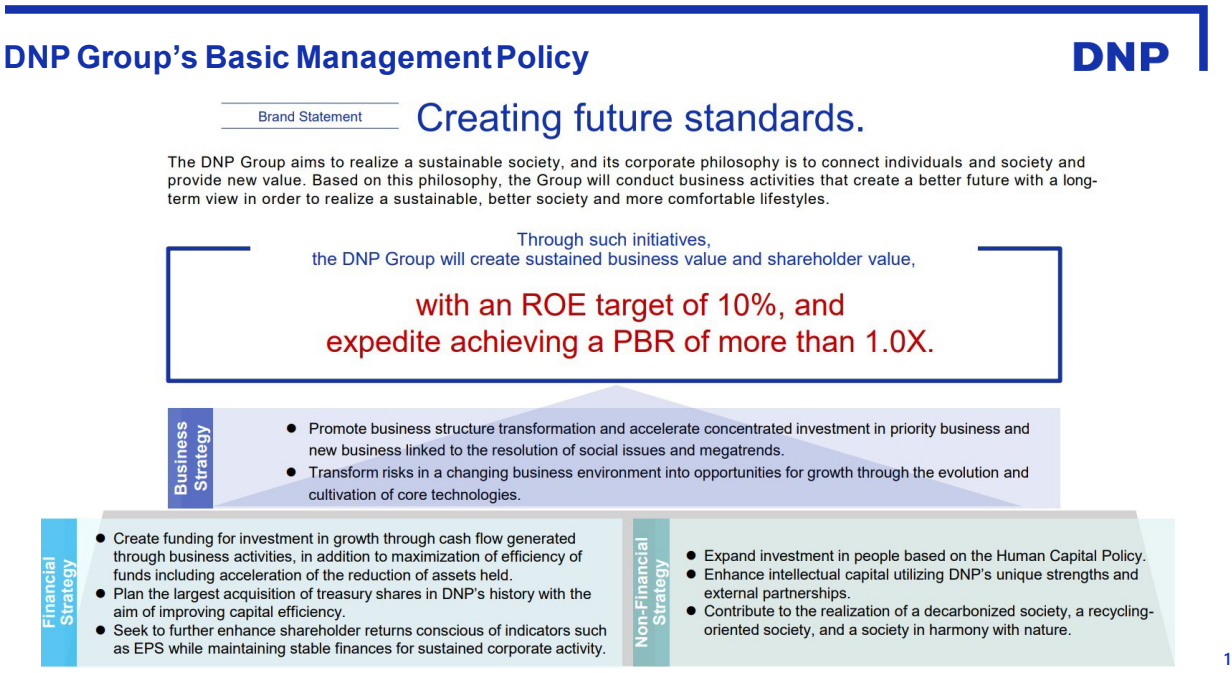
We greatly appreciate your participation in the DNP Group IR-Day despite your busy schedules. We will proceed according to the presentation materials. Both the Japanese and English versions of the materials are available on the DNP website.

Today's speakers are Mr. Kitajima, President, as well as the executives in charge listed on this slide, for a total of seven people.

As for today's agenda, the seven speakers will give their presentations from 1:00 PM to approximately 2:30 PM, followed by a 10-minute break and then a 50-minute Q&A period from 2:40 PM. The end time is scheduled for 3:30 PM.

This is the first time for the DNP Group to hold an IR-Day. We would appreciate your comments on the presentation materials, time allocation, and other issues in the post-conference survey so that we can make further improvements.

Now, let's move on to the presentations. First, President Kitajima will give an explanation of "sustained enhancement of corporate value." President Kitajima, please proceed.



Kitajima: Hello, everyone. I am Kitajima, President. Thank you for joining us today at the DNP Group IR-Day.

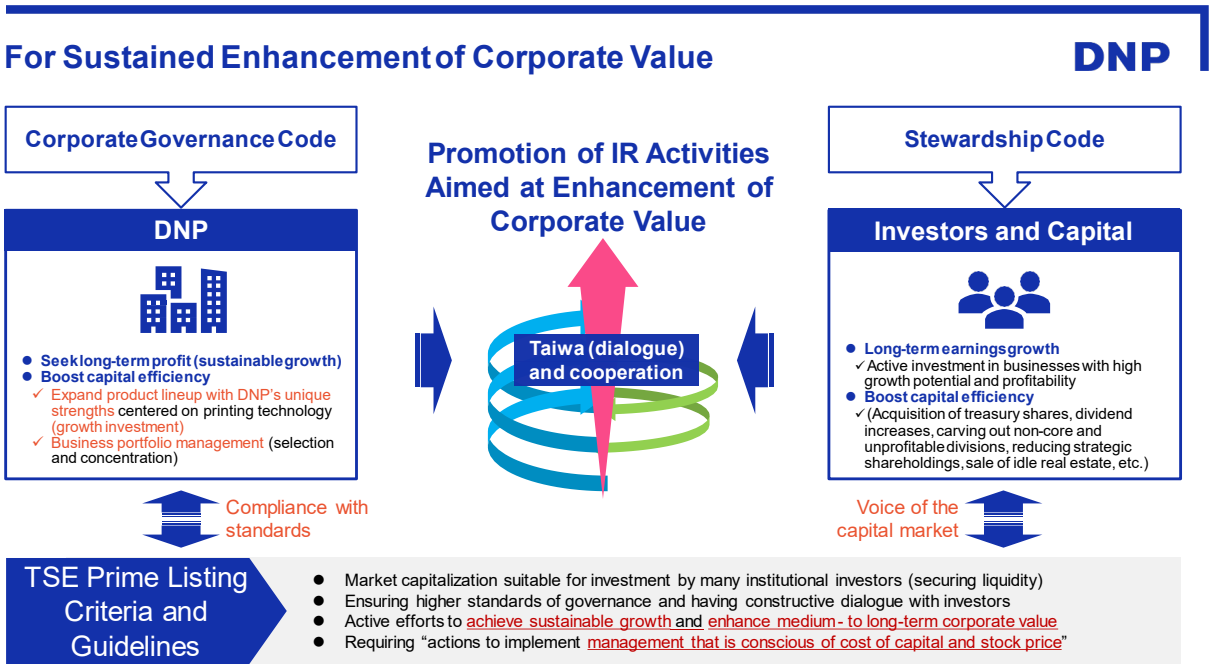
The DNP Group's Corporate Philosophy is "The DNP Group connects individuals and society, and provides new value" and we strive to realize a sustainable, better society and wellbeing lives. DNP focuses on solving social issues, creating new value that meets people's expectations and making this value continually exist as "basics" that are indispensable in people's daily lives. We broadly express this aspiration in our Brand Statement of "Creating future standards."

In February of 2023, prior to the Tokyo Stock Exchange's request in March 2023 to "take actions to implement management that is conscious of cost of capital and stock price," we announced the "DNP Group's Basic Management Policy," as well as a message to all of our stakeholders that we aim to achieve ROE of 10% and P/B ratio of over 1.0x as soon as possible.

Following this, we announced the framework of our new medium-term management plan in March, followed by a new three-year medium-term management plan in May, in three separate steps. During this period, we have clarified and implemented specific reform measures, taking into account feedback from our investors and other factors. Since then, the growth rate of our share price has been higher than TOPIX, with P/B ratio hovering around 1.0x.

We are aware that the interest and expectations of a wide range of stakeholders are growing, as evidenced by the increasing number of media coverage of DNP's initiatives. We have decided to hold an IR-Day today to give you a better understanding of DNP's medium- and long-term growth.

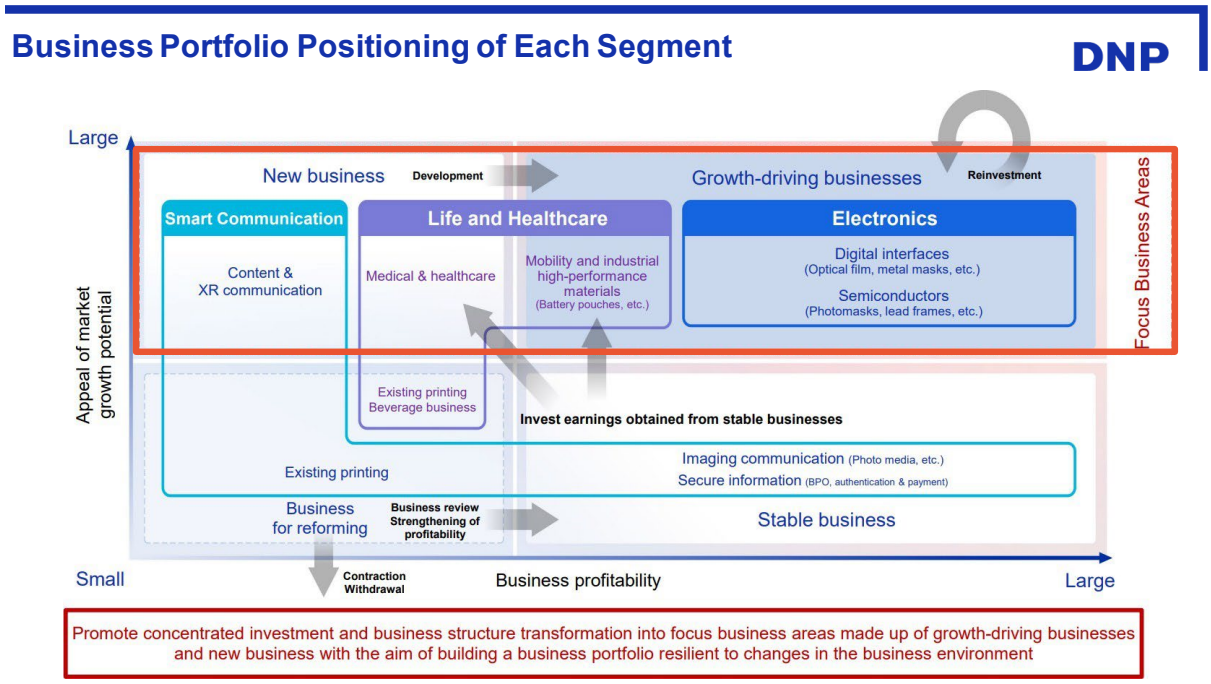
This page shows the Basic Management Policy announced last February. The three strategies presented in this policy have so far been explained in the results briefing, mainly in terms of the financial results and the progress of the financial strategy, while the sustainability briefing has been held to provide a deeper understanding of the initiatives in the non-financial strategy. In addition to the above, in today's IR-Day, we will explain the transformation of the business portfolio and the business strategy with a focus on growth-driving businesses and new businesses.



See page two.

DNP believes that "dialogue and cooperation" with investors is essential to continuously improve corporate value while responding to the Corporate Governance Code, the Stewardship Code, and requests from the Tokyo Stock Exchange.

We will continue to hold such opportunities on a regular basis to enhance the quality and quantity of information disclosure and to deepen dialogue in an effort to realize management that is conscious of cost of capital and stock price.



See page three.

The DNP Group has applied its business portfolio to the four quadrants in this medium-term management plan and clearly presented the positioning of each segment.

To achieve our medium- and long-term goals, we will optimally allocate management resources in all areas, including not only new and growth-driving businesses, which are our focus business areas, but also stable business and business for reforming, to build an even stronger business portfolio and improve profitability and capital efficiency.

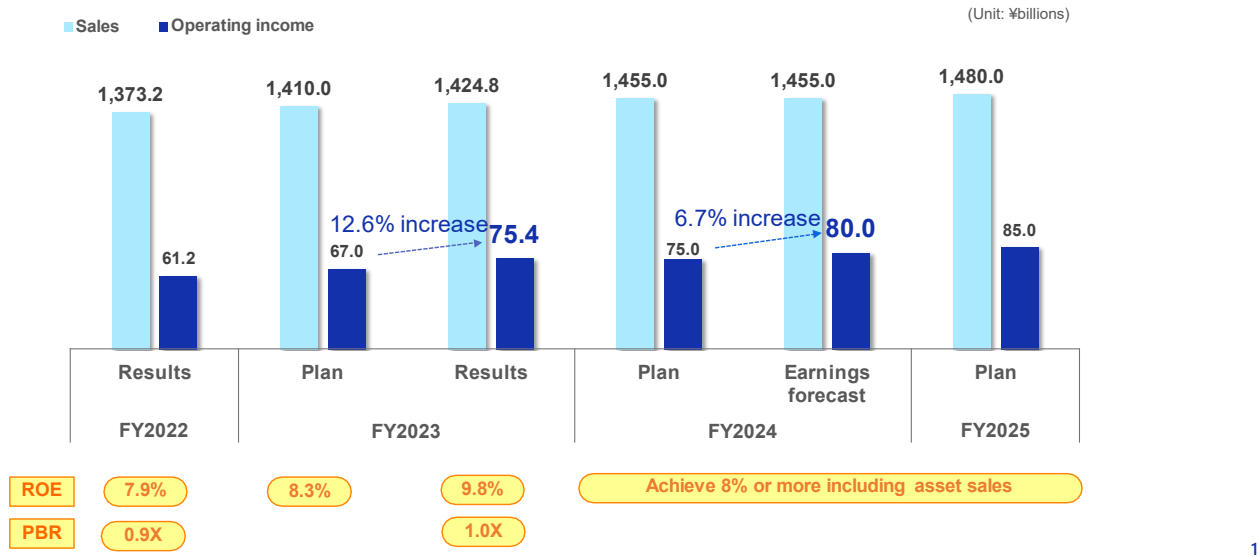
On the other hand, there are concerns about global climate change, the impact of geopolitical risks, economic fluctuations due to elections and monetary policies in various countries and regions, as well as rising costs related to raw materials, energy, and logistics. I also believe that rapid advances in AI and other technologies could cause environmental, social, and economic changes beyond our imagination.

DNP is building a system that not only responds flexibly and agilely to various risks or variable factors, but also transforms them into business opportunities by anticipating changes and initiating reforms on its own.

After this, Mr. Tsuchiya, Senior Executive Corporate Officer in charge of business promotion, will explain the transformation of our business portfolio, which is the overall picture of our business strategy in light of environmental, social, and economic changes, and the three segments that comprise it. The executives in charge of each business will explain about the growth-driving businesses and new businesses that DNP has positioned as its focus business areas.

Wakabayashi: Next, Mr. Tsuchiya, Senior Executive Corporate Officer, will explain our segment strategy. Senior Executive Corporate Officer Tsuchiya, please begin.

Overview of Financial Results for FY2023: Sales and Operating Income DNP



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Tsuchiya: I am Mitsuru Tsuchiya, Senior Executive Corporate Officer in charge of business promotion.

First, I would like to reiterate the progress of the current medium-term management plan.

In FY2023, the first year of the plan, operating income was JPY75.4 billion, 12.6% higher than the planned JPY67 billion, thanks to strong sales of growth-driving businesses such as digital interfaces, as well as solid sales of battery pouches and secure information business, and the price pass-through of surging raw material prices.

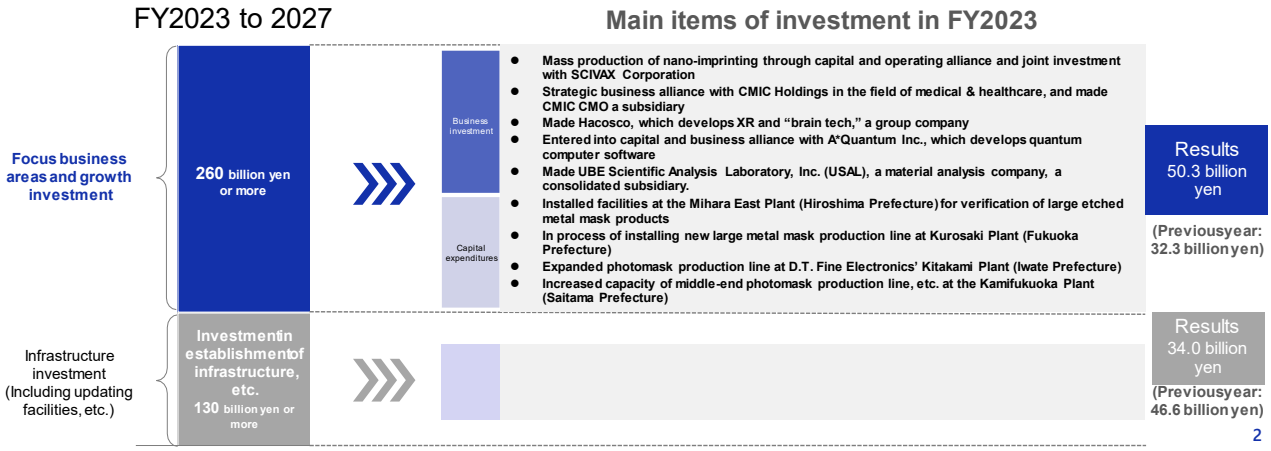
In FY2024, as in FY2023, as growth-driving businesses are expected to continue to perform well and the business for reforming will also contribute to improved profitability, we expect operating income of JPY80 billion, 6.7% higher than the JPY75 billion operating income forecast.

Progress with Medium-term Management Plan: Investment in Focus Business Areas, Etc.

DNP

Growth investment and infrastructure development investment: **390 billion yen or more** (cumulative amount for FY2023-FY2027)

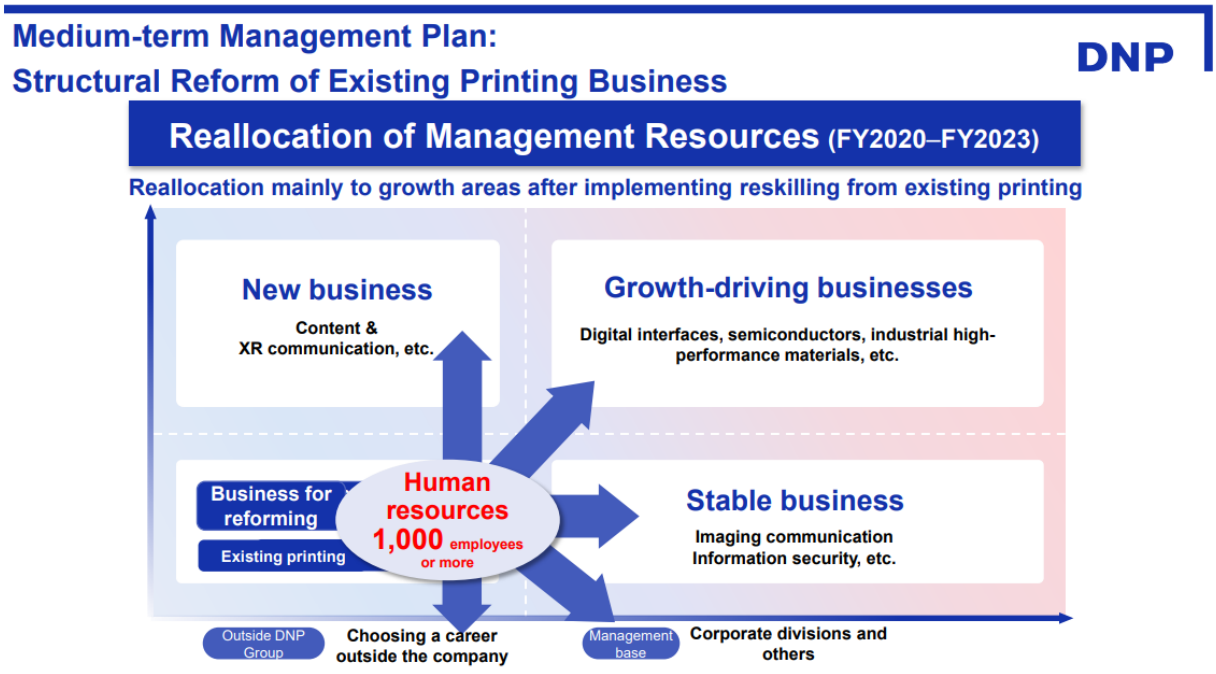
Promote capital investment, global expansion and consideration of external alliances centered on focus business areas.



Next is the progress of concentrated investment in focus business areas, which is one of the business strategies in the medium-term management plan.

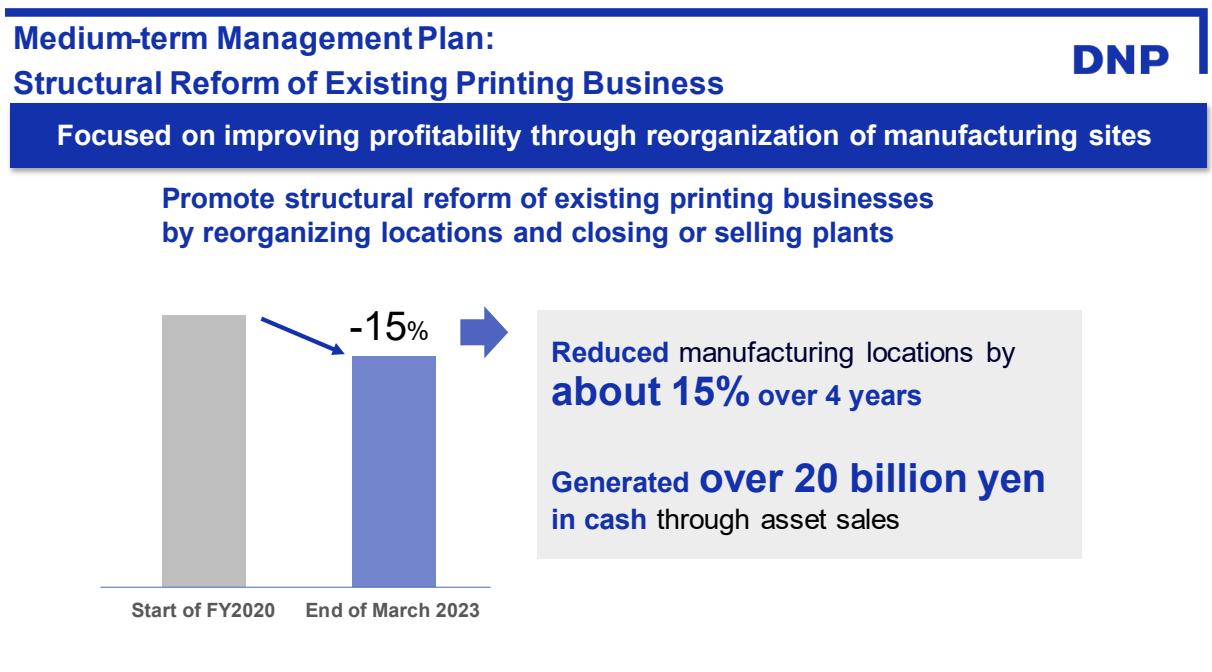
The total amount of investment is expected to be more than JPY390 billion over five years, of which more than JPY260 billion is planned to be allocated to focus business areas, etc. Against the plan, investments in the focus business areas, etc. in FY2023 amounted to JPY 50.3 billion. We have also invested JPY34 billion in stable business.

Especially in the electronics sector, where market growth is expected, we are aggressively investing in metal masks- and photomasks-related facilities, which we believe will contribute to our business performance in the current and next fiscal years and beyond.



I would like to discuss another business strategy, structural reform.

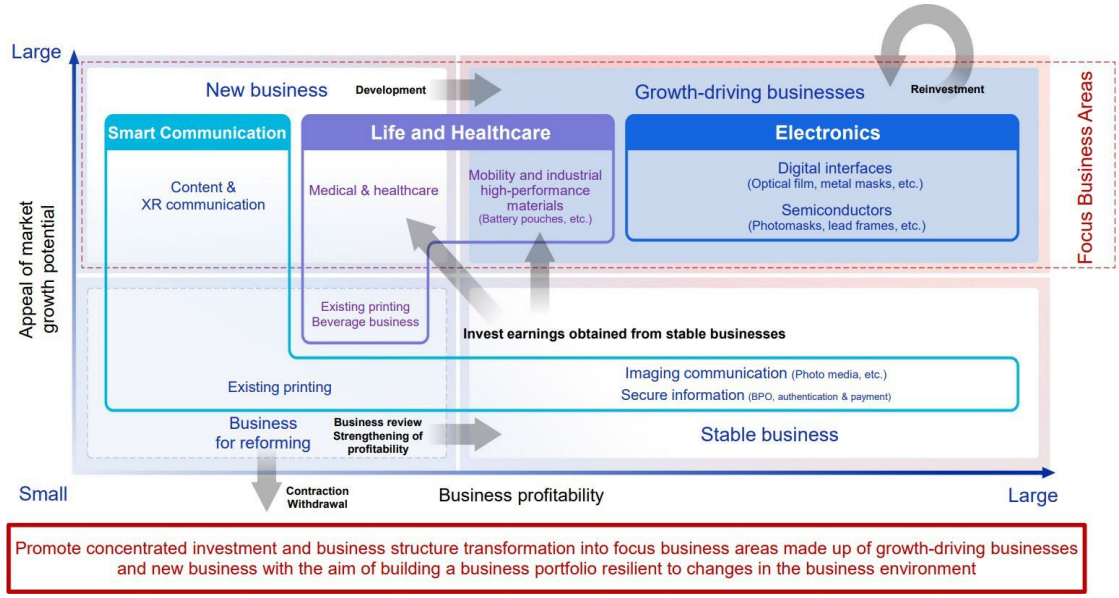
Structural reform has been implemented continuously since the previous medium-term management plan period. From FY2020 onward, we are reallocating more than 1,000 personnel from the area of business for reforming to mainly growth areas through reskilling and other means.



In the same period, we also reduced the size of our manufacturing facilities by approximately 15%, generating over JPY20 billion in cash through the sale of these assets. We will continue to improve capital efficiency by using these funds to invest in growth or to purchase treasury stock.

Business Portfolio Positioning of Each Segment

DNP



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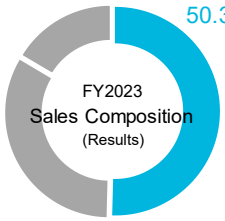
From here, we will provide an overview of each segment.

Our business segments are smart communication, life and healthcare, and electronics, and if we put them into a diagram divided into four quadrants based on market growth and profitability, this is how they are positioned.

Although there are gradations, the businesses within each segment are not all in the same position; each segment has a focus business, a stable business, and a business for reforming. Our policy is to build a strong portfolio by appropriately implementing the "concentrated investment in focus business areas" and "business structure reform" set forth in the business strategy of the medium-term management plan in the circumstances in which each business is operating.

Smart Communication (1) Business Content



FY2023 result

Sales:	719.4 billion yen
Operating income	26.1 billion yen
Operating income margin:	3.6%

Sales in parentheses

Imaging communication (105 billion yen)

Information Security (208 billion yen)

Marketing (130 billion yen)

Publishing (255 billion yen)

New business/ Other Approx. 22 billion yen

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Let me begin with the smart communication segment.

This segment includes "imaging communication," which handles dye-sublimation thermal transfer printing media for photo prints, photo printers, and ID photo machines; "information security," which provides BPO services and smart cards and magnetic cards; and "content & XR communication," which is a new business to focus on.

Smart Communication (2) Market Environment

Main Businesses			Market Trends	Market Outlook* (CAGR)
Imaging communication	Dye-sublimation thermal transfer printing media for photo prints	↗	• Although demand declined in FY2020 due to the impact of COVID-19, it recovered from FY2021 onward. • Increase in dry type including dye-sublimation thermal transfer printing media for photo prints due to switching from the silver halide method.	+4% (2022–2027)
Information security	BPO	↗	• The market is expected to expand against a backdrop of work style reform and DX promotion due to labor and human resource shortages. • Increase in the need for services that combine human operations with digital technology.	+3% (2024–2027)
	Smart cards and magnetic cards	→	• Although the percentage of cashless payments has increased to over 35% due to the penetration of QR code payments, card payments still account for over 80% of the total, making them the mainstay of the shift to cashless payment.	+1% (2022–2026)
Marketing	–	↘	• Although the paper media market remains large at 1.7 trillion yen, it will continue to shrink slowly due to the progress of digitization. The digital marketing market will continue to expand.	Paper media: -1.5% (2023 vs. 2022)
Publishing	Books and magazines	↘	• The paper media market for both magazines and books is expected to continue shrinking. • Online bookstores and the e-book market are growing.	Paper media: -5% (2023–2028)
New business	Content & XR communication	↗	• Overseas demand for comics, anime, and games originating in Japan will grow, and the market for content development such as merchandise and services will be active. • In addition to the demand for XR in the area of extraordinary experiences, utilization in various industries such as education and training is increasing.	Expanding

* Market outlook is DNP forecasts based on various surveys

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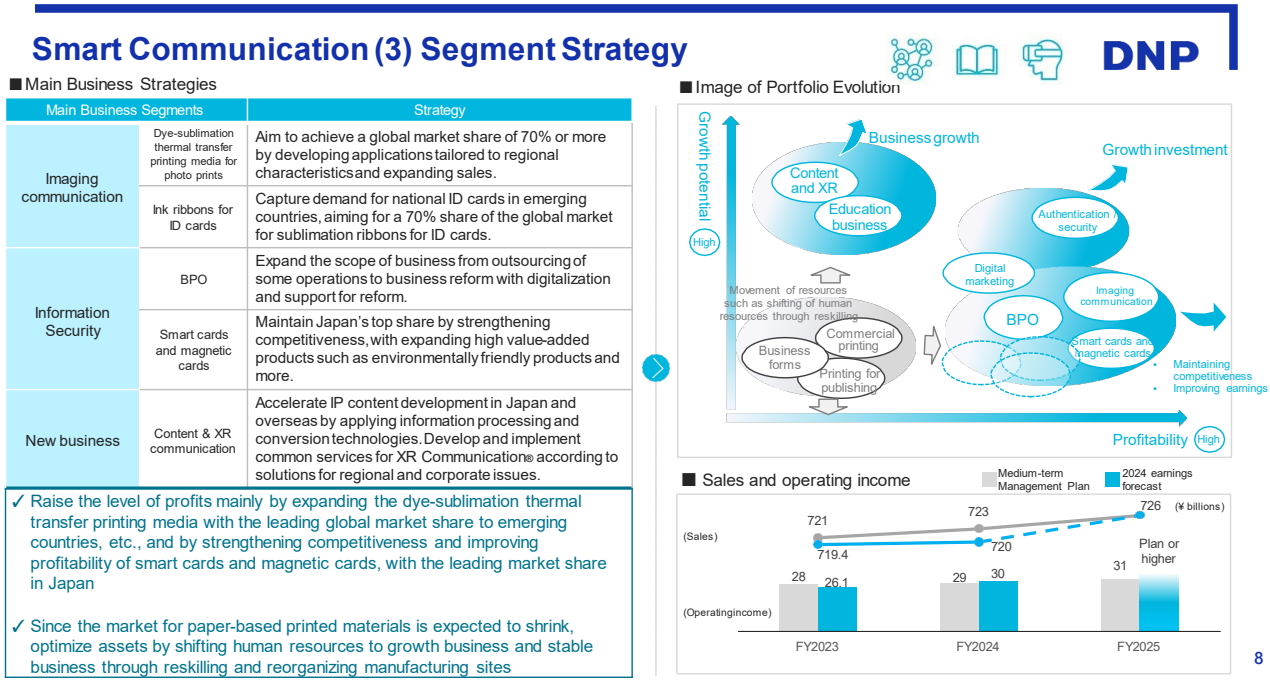
This page summarizes the market environment in which each business operates.

The stable market environment is expected to continue for "imaging communication" and "Information security," which are positioned as our stable businesses. The market for "content & XR communication" is also expected to expand and become more active in the future.

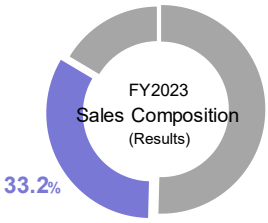


In this market environment, demand for dye-sublimation thermal transfer printing media for photo prints, which has the largest share in the global market, is expected to grow in emerging countries and other regions. We aim to further increase its market share by developing applications tailored to regional characteristics and expanding sales.

In addition, we will further strengthen the competitiveness of smart cards and magnetic cards, which have the largest market share in Japan, by expanding high-value-added products such as environmentally friendly products.

Since the market for paper-based printed materials, such as publication printing, or commercial printing and business forms, is expected to continue to shrink, we will continue to optimize our assets by shifting human resources to growth business and stable business through reskilling or by reorganizing our manufacturing sites.

Life & Healthcare (1) Business Content



FY2023 result

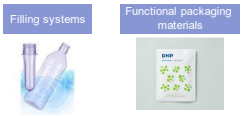
Sales:	472.3 billion yen
Operating income	13.3 billion yen
Operating income margin:	2.8%

Sales in parentheses

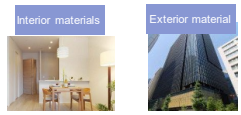
Mobility and industrial high-performance materials (Approx. 75 billion yen)
Battery pouch | Photovoltaic modules | Decorative films

Medical & healthcare (Approx. 42 billion yen)
Pharmaceutical business | Packaging for medical products and pharmaceuticals

Packaging (Approx. 230 billion yen)
Filling systems | Functional packaging materials



Living spaces (Approx. 62 billion yen)
Interior materials | Exterior material



Beverage business (Approx. 56 billion yen)

Other (Approx. 7 billion yen)

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Next is the life & healthcare segment.

This segment consists of "mobility and industrial high-performance materials," which includes battery pouches, photovoltaic modules, and decorative films; "medical & healthcare," which includes the pharmaceutical business and packaging for medical products and pharmaceuticals; "packaging," which includes aseptic filling systems and functional packaging materials; "living spaces," which includes interior and exterior materials for homes and offices; and "beverage business."

Life & Healthcare (2) Market Environment

Main Business Segments			Market Trends	Market Forecast (CAGR)*1
Mobility and industrial high-performance materials	Battery pouch	↗	• The trend toward electrification of automobiles will remain unchanged over the medium to long term, and demand is expected to increase mainly in the US as automakers shift to in-house battery manufacturing (pouch type).	EVs: +13%*2 (2023–2030)
	Photovoltaic modules	↗	• The global market for solar power generation systems will grow 2.5x from 2020 to 2030. • Demand is growing in the US, EU, and China, due to policy initiatives, etc.	Global market for power generations systems: +10% (2020–2030)
	Automotive decorative films	↗	• There are expectations for expansion of exterior film, especially for use as a substitute for paint, amid growth in high-end design products for both interior and exterior applications.	Expanding
Medical & healthcare	–	↗	• Stable growth is expected, with the size of the global pharmaceutical market expected to expand from 141 trillion yen in 2018 to 196 trillion yen in 2030.	Global market for pharmaceuticals +2.8% (2018–2030)
Packaging	–	↗	• The global market for soft packaging is growing (approx. 40 trillion yen in 2023), and growth is expected in Asian markets and for environmentally friendly products in the future.	Global market for soft packaging: +4.7% (2024–2030)
Living spaces	–	→	• Domestic housing starts are expected to continue to decline. • Overseas demand is sluggish at present, but growth will continue over the medium to long term due to population growth.	Japan: -1% (2024–2028) Overseas:+3%(2023-2029)
Beverage business	–	→	• Overall business conditions recovered after COVID-19, and demand, including inbound demand, remained strong.	+1–2% (2024–2026)

*1 Market outlook is DNP forecasts based on various surveys
*2 Total for EVs, PHEVs and HEVs

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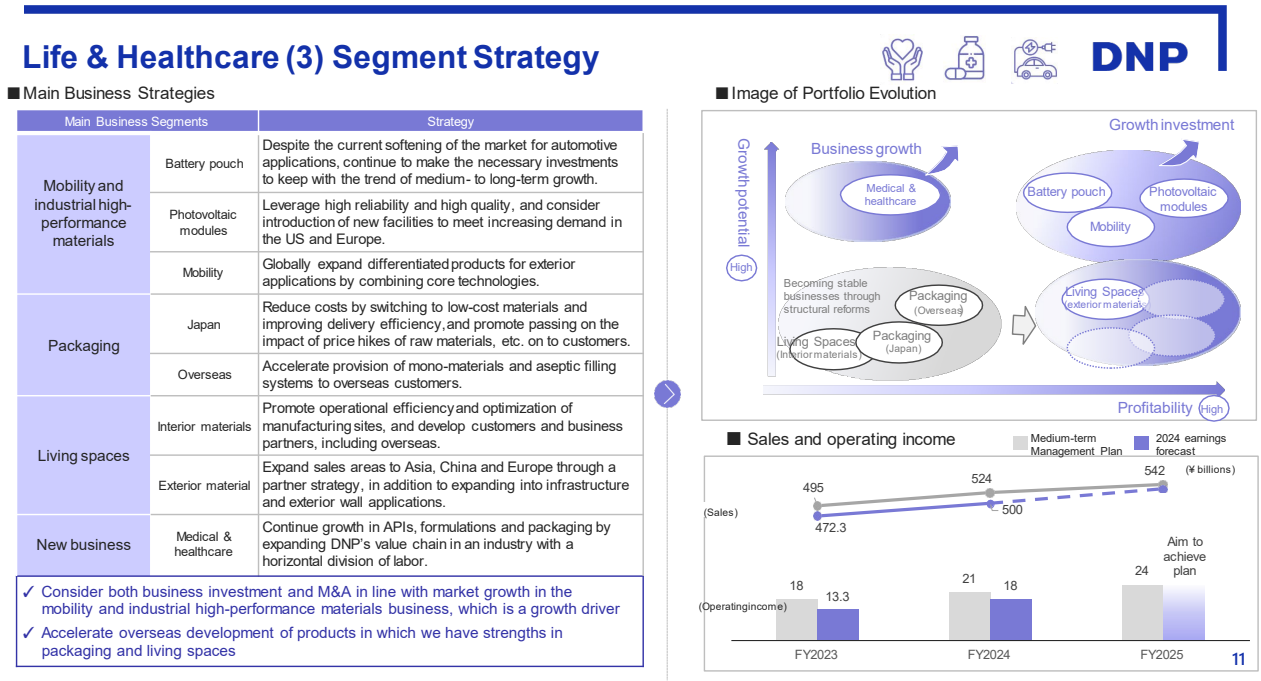
Here is a summary of market trends and market growth potential for each of the businesses.

First, in the market for battery pouches, although demand for EVs has recently stalled, we believe that the trend toward various types of EVs, including plug-in hybrids, will not change over the long term and that steady growth can be expected.

Similarly, the photovoltaic modules market, which is included in the "mobility and industrial high-performance materials," is also expected to continue growing worldwide, and automotive decorative films are expected to grow not only for interior applications but also for exterior applications as a substitute for paint.

In the new "medical & healthcare" business, the global market for pharmaceuticals is expected to grow steadily, and we will focus on this.

In "packaging," "living spaces," and "beverage," although we do not expect much growth in the domestic market, we see a certain amount of room for growth, especially in "packaging" and "living spaces," especially in overseas markets.



The strategy for each business based on these market trends is on the left hand side of the table.

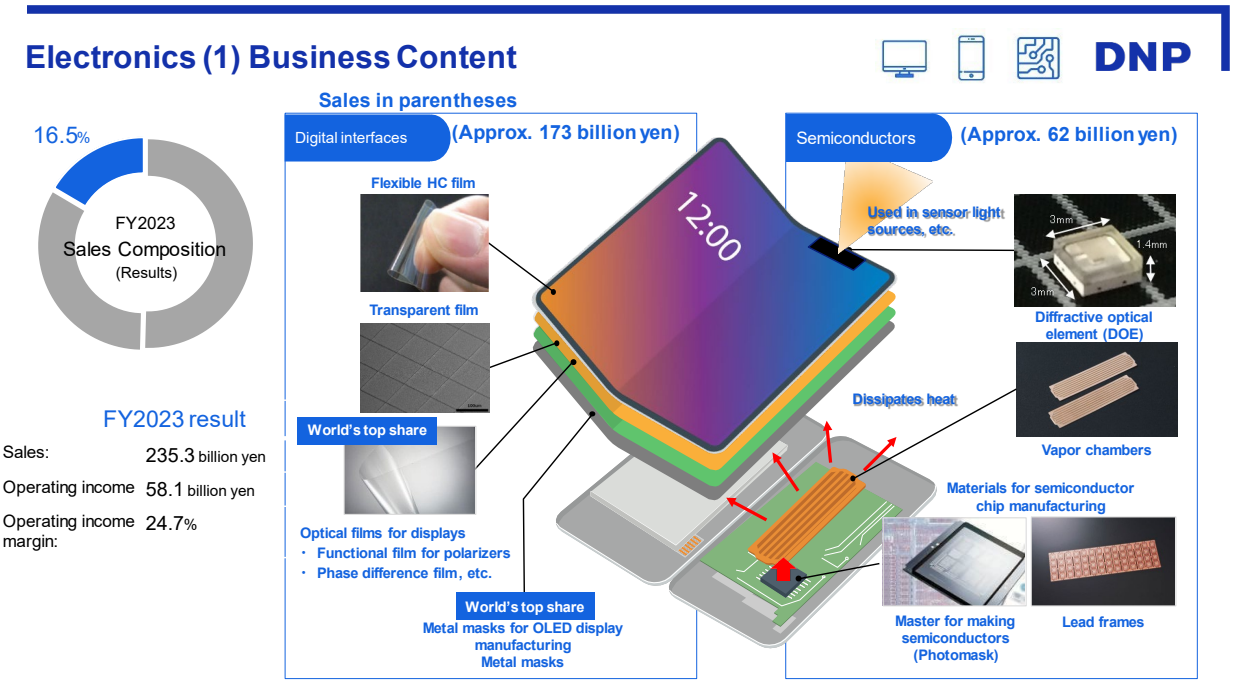
In battery pouches, we will continue to make the necessary investments to keep pace with market growth. In photovoltaic modules, we will invest in new facilities and other growth areas to keep pace with demand growth in Europe and the US. In mobility, we will accelerate global development of differentiated products that leverage DNP's core technologies.

In "packaging" and "living spaces," we will continue to improve efficiency in Japan and provide products that contribute to maximizing business by capturing the demand of each market, especially globally.

In the new "medical & healthcare" business, DNP will expand the areas in which it can provide value in the industrial value chain.

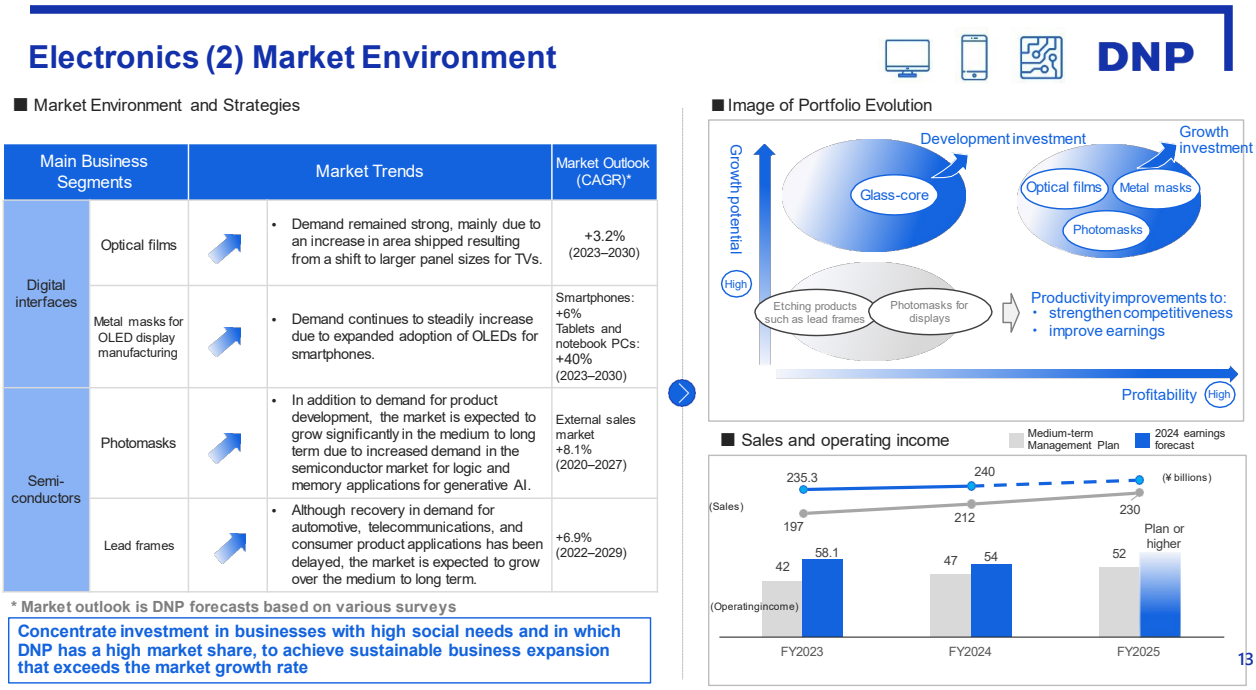
By steadily implementing these strategies, we believe we will be able to evolve our portfolio as shown in the upper right-hand chart.

As a result, as shown in the graph below right, we believe that we can achieve steady growth in both sales and operating income in FY2024, albeit slightly below our medium-term management plan, by reflecting the current market stagnation of battery pouches and other factors.



Next is the electronics segment.

This segment consists of "digital interfaces," which includes metal masks for OLED display manufacturing and optical films for displays, which boast the world's top market share, and "semiconductors," which includes photomasks and lead frames.



Next, we will explain the market trends and market growth potential for each business.

Demand for optical films remains strong, with the long-term market CAGR expected to grow at about 3.2%, as the trend of increasing shipment area continues, mainly due to a shift to larger panel sizes for TVs.

Regarding the metal masks for OLED display manufacturing, in addition to the growing adoption in smartphones, the adoption in tablets and notebook PCs is expected to grow and expand in the future, with a projected CAGR of approximately 40% from 2023 to 2030, especially in the tablet and notebook PC markets.

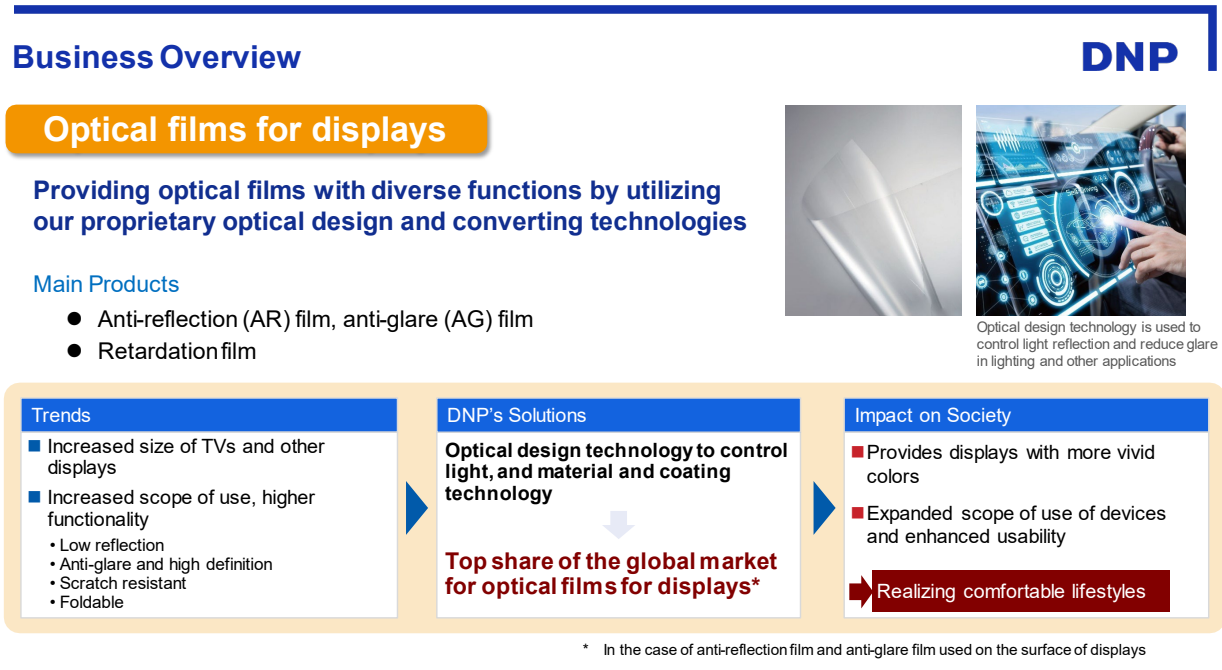
As for photomasks, the external sales market is expected to grow at a market CAGR of approximately 8% from 2020 to 2027, due to increasing demand in the semiconductor market for logic and memory applications for generative AI, as well as product development demand from client companies. The market is expected to grow significantly in the medium to long term.

Although the recovery of demand for lead frames for automotive, telecommunications, and consumer products applications has been delayed, the market for lead frames is expected to grow at a market CAGR of about 7% from 2022 to 2029 in the medium to long term.

As shown in the image of portfolio evolution in the upper right figure, we will concentrate investment in businesses with high marketability, i.e., high social needs and high DNP market share, mainly in metal masks, optical films and photomasks, as well as in the development of glass cores, which are expected to be used as next-generation semiconductor packaging materials, to achieve sustainable business expansion that exceeds the market growth rate.

Sales and operating income are also expected to exceed the levels of the medium-term management plan in both 2024 and 2025, as shown in the graph below right.

Wakabayashi: Next, Corporate Officer Tomizawa will explain about optical films and metal masks in "digital interfaces," which is positioned as a growth-driving business. Corporate Officer Tomizawa, please begin.

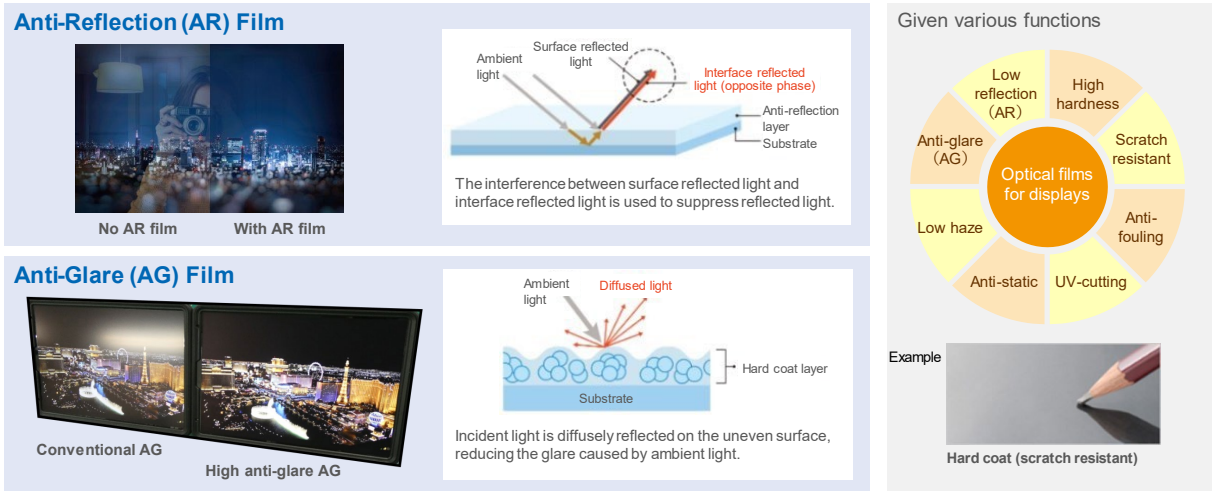


Tomizawa: I am Corporate Officer Tomizawa. I will now explain about optical films in "digital interfaces."

See page two. First, this is a business overview. We provide optical films for displays with diverse functions by utilizing our proprietary optical design and converting technologies.

Main products are AR or anti-reflection film, AG or anti-glare film, and retardation film. The trend in these products is increased size of TVs and other displays, changes in devices, and higher functionality due to increased scope of use, etc. In response to these changes, we have introduced optical design technology to control light, and material and coating technology, and the world's widest facility for display applications, and we have gained the world's top share in optical films for displays.

We also hope that these technologies will enable displays with more vivid colors, expand the scope of use of devices, enhance usability, and make consumers' lives more comfortable.



See page three. Next, I will explain the functions and applications of our main products.

Optical films are mainly used on the top surfaces and inside TVs, monitors, notebooks, tablets and smartphones.

AR film suppresses reflected light by utilizing the interference between surface reflected light and interface reflected light. In addition, the AG film diffuses incident light on the uneven surface to reduce the glare caused by ambient light. Both are gentle on the eyes and are used on most display surfaces.

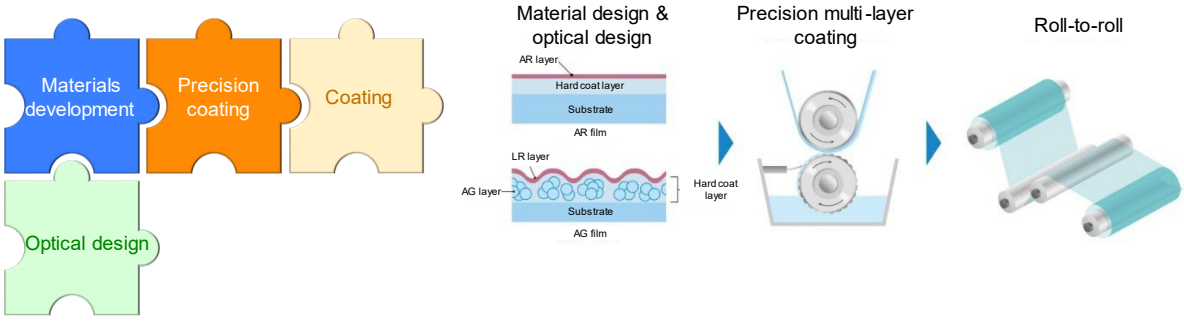
In addition, we provide products that can be used comfortably in any environment by adding various functions such as high hardness, scratch resistance, anti-fouling, UV-cutting, and anti-static according to the device.

DNP's Basic Technologies

DNP

Technology for Larger Sizes and High Functionality Using Clean Coating Centered on Proprietary Optical Design Technology

DNP's core technologies



This is a precision coating technology derived from coating technology in which inked materials are thinly and uniformly applied to cover the surface of a substrate.

Optical film with diverse functions was created by deepening optical design and materials development

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See page four.

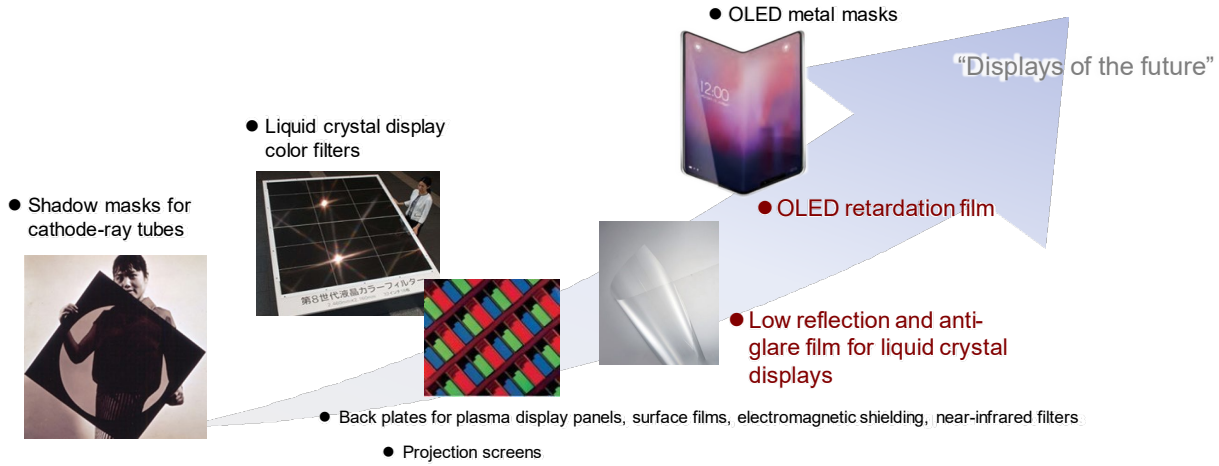
The basic technology for these products is the technology for larger sizes and high functionality using clean coating centered on our proprietary optical design technology. In both AR film and AG film, optical film is a highly transparent substrate coated with a hard coat layer several microns thick, and the AR layer is a uniform coating about 100 nanometers thick.

In addition, when adding functions or forming reflective layers, two or three layers can be manufactured inline on a roll-to-roll basis, resulting in high productivity and high-quality manufacturing.

History of DNP's Display Business

DNP

Contributing to the development of display technology from research and development to mass production to realize comfortable lifestyles Providing new value for "displays of the future"



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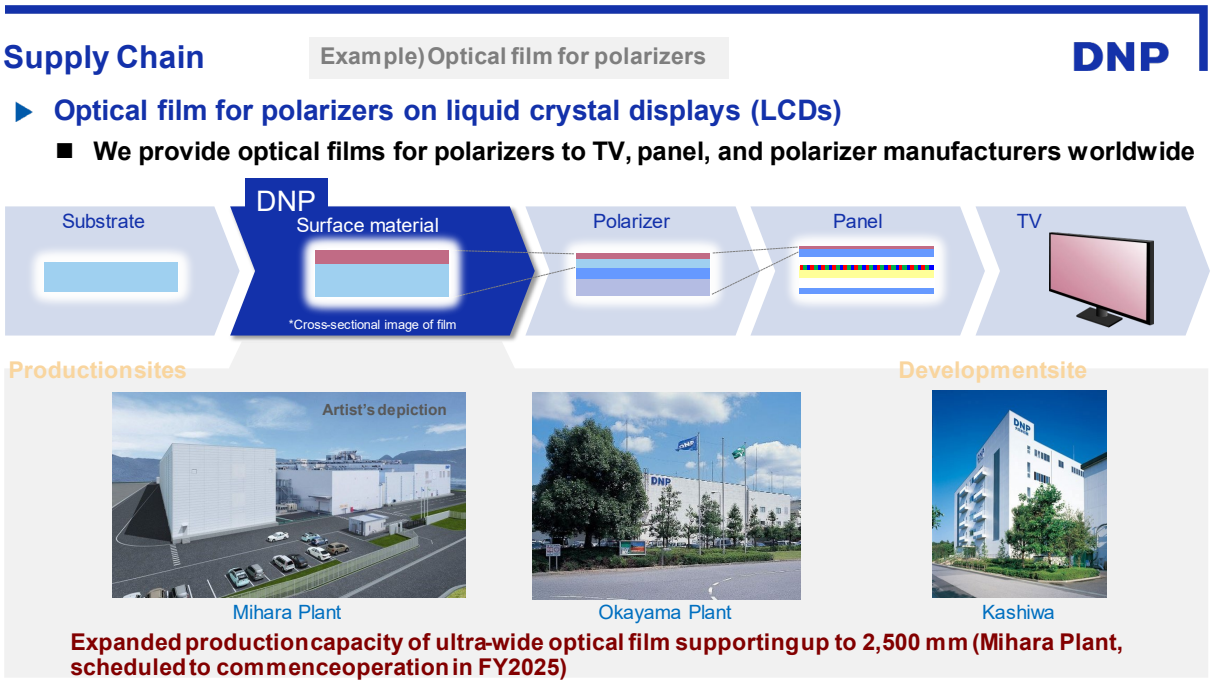
See page five. This is the history of DNP's display business.

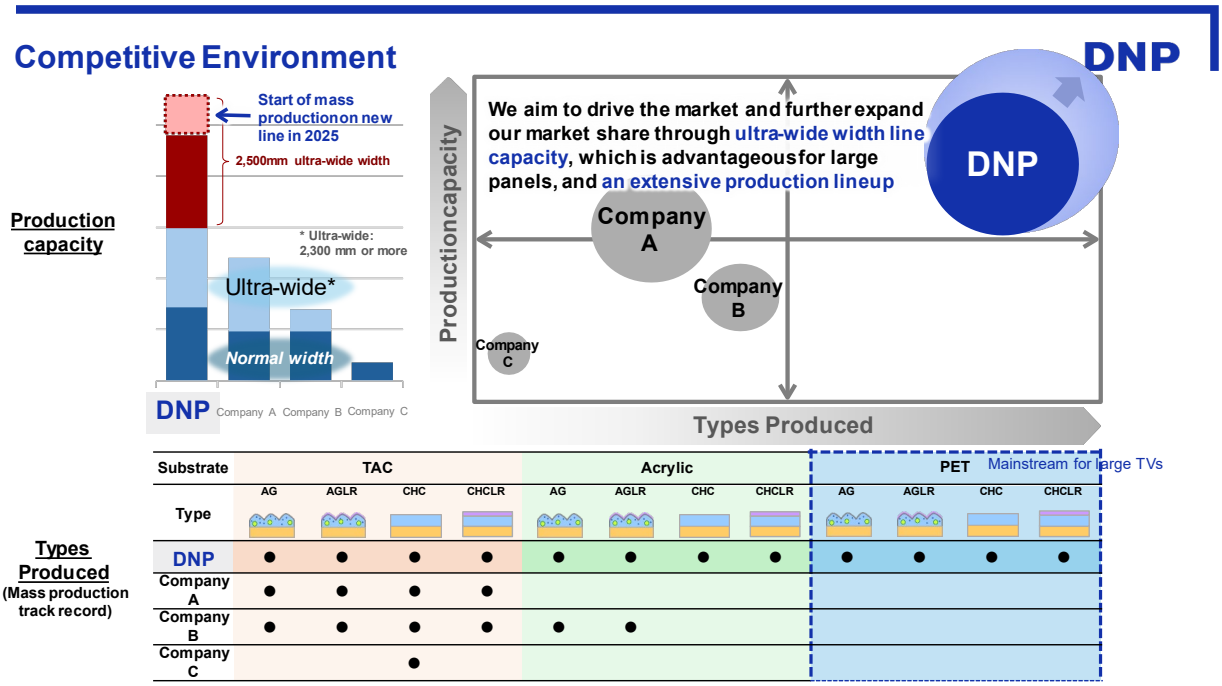
DNP began with shadow masks for cathode-ray tubes in 1958, followed by liquid crystal display color filters and projection screens, back plates, surface films, electromagnetic shielding, and near-infrared filters for plasma display panels, and now our main products, low reflection film and anti-glare film for liquid crystal displays, and OLED metal masks. We have contributed to the development of display technology from research and development to mass production in order to realize comfortable lifestyles, and will continue to provide new value for "displays of the future."



See page six. This section describes the supply chain of surface treated film for polarizers, our main product in optical films.

DNP supplies the substrate, a highly transparent film, with AR and AG functions, as well as additional functions, to polarizer manufacturers, who then attach the polarizers to the panel. Ultimately, DNP's optical film will be on the top surface of the consumer's devices.

Our customer base of polarizer manufacturers is spread across Japan, Korea, Taiwan, and China, and DNP provides surface treatment films to all of them. Production is carried out at two plants, the Mihara Plant in Hiroshima Prefecture and the Okayama Plant in Okayama Prefecture, while development is also carried out at Kashiwa in Chiba Prefecture. In FY2025, a second line will be put into operation as an ultra-wide 2,500 mm width line to expand production capacity.



See page seven. I would like to discuss the competitive environment.

In the area of optical films for polarizers, we are the only company in the industry to have a 2,500 mm ultra-wide line to efficiently take 65-inch TVs, and with our extensive product lineup, we will respond to changes in devices and develop products to meet customer needs.

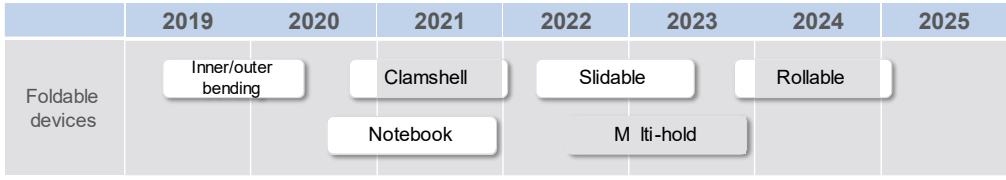
Among the many product lineups, the substrate is also an important element, and is currently broadly classified into TAC or triacetyl cellulose, acrylic, and PET or polyethylene terephthalate. In particular, for large-size TVs, special PET is used because of its low moisture permeability, which eliminates rainbow irregularities caused by birefringence even though it is a stretched film, and is showing great expansion on the strength of DNP's patents.

Competitive Strategy — Development of Optical Films for New Devices

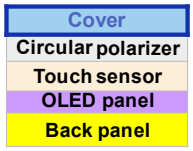
DNP

▶ Cover film for foldable displays

■ **We have developed films with high hardness and excellent flexibility through optimal selection of substrates and ink design and formulation**



* Estimate by DNP based on various materials

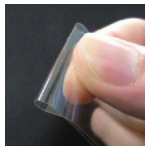


Layer composition

Cover film

Thin retardation film

Cover Film for Foldable Devices



- Achieving both “hard and foldable”
- Scratch resistance close to that of glass
- Functions such as anti-static and anti-fouling properties can be added

8

See page eight. Next is the competitive strategy.

In addition to optical films used on the top surface of displays, DNP offers coating-type retardation films for OLED displays.

We also develop and produce products with high hardness and excellent flexibility in the foldable specifications of smartphones that have been on the market since around 2019, through optimal selection of subtrates and ink design and formulation. We will develop products with optimal characteristics and functions for foldable devices that are expected to be deployed in the future.

DNP's Strengths

DNP

- **Technology for larger sizes and high functionality, optical design to control light, and material and coating technology**
- **In-line multilayer coating production equipment for products with high functionality and high quality**
- **Extensive patents and know-how related to materials, manufacturing methods and products**
- **Ability to provide a stable supply of high-quality products while pursuing high productivity**
  - **——World's largest* ultra-wide 2,500 mm line for surface treatment films for displays**
  - **——Roll-to-roll production in a clean environment**

* Fuji Chimera Research Institute, Inc.
2023 Current status and future outlook for display-related markets.

9

See page nine. The above explanation is summarized as DNP's strengths.

-Technology for larger sizes and high functionality, optical design to control light, and material and coating technology.

-In-line multilayer coating production equipment for products with high functionality and high quality.

-Extensive patents and know-how related to materials, manufacturing methods and products.

-Ability to provide a stable supply of high-quality products while pursuing high productivity.

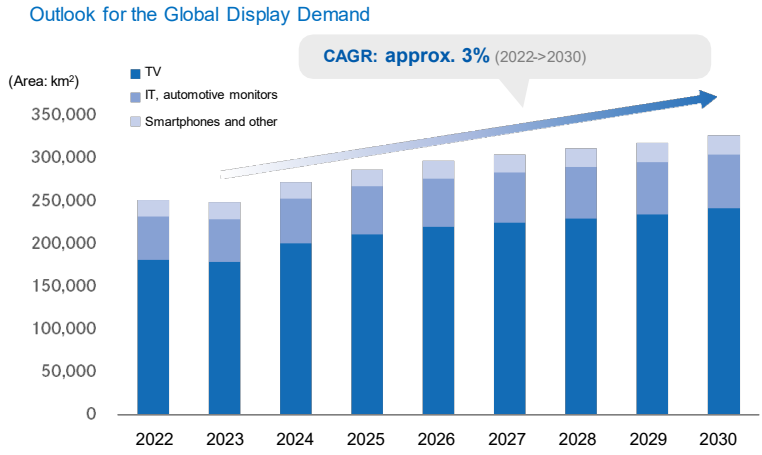
-World's largest ultra-wide 2,500 mm line for surface treatment films for displays.

-Roll-to-roll production in a clean environment.

Market Environment

DNP

The display market is expected to grow at a CAGR of about 3%, against a backdrop of the trend toward larger TVs



Source: Omdia Display Long-Term Demand Forecast Tracker 4Q23

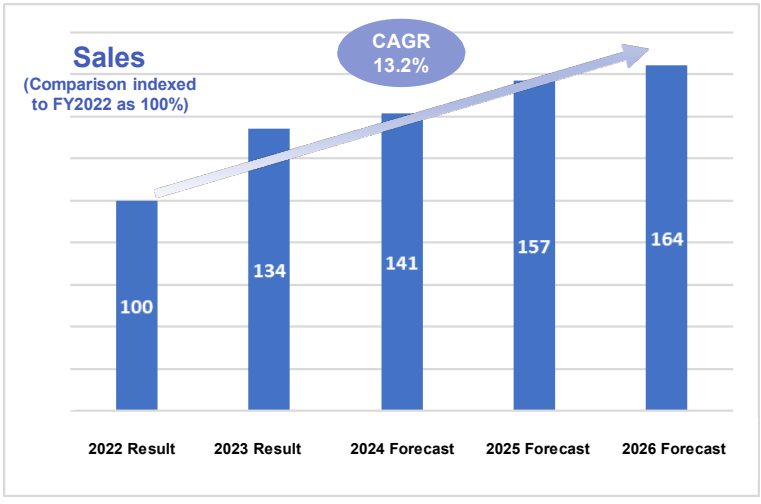
10

See page 10. Next, the market environment.

The horizontal axis of the bar chart is from 2022 to 2030, and the vertical axis is area. Although we do not expect significant growth in terms of unit volume, we expect growth at a CAGR of about 3%, driven by the trend toward larger TVs.

Performance and Medium-Term Plan

DNP



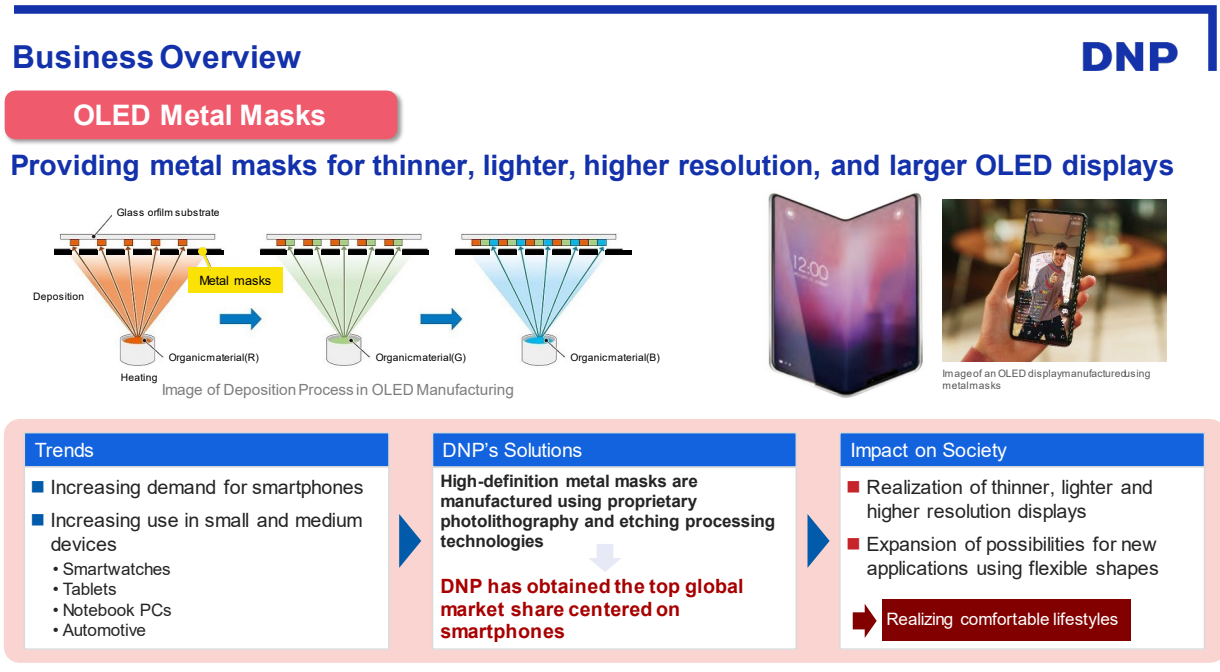
Growth rate exceeding market growth rate

11

See page 11.

DNP plans a CAGR of 13.2%, which is higher than the market growth rate, by responding to changing displays in the future, responding to high value-added products, and increasing the market share of existing products.

This is all about optical films.



Next, I will give an overview of another growth-driving business, metal masks for OLED displays. See page two.

Metal masks are used in the deposition method, which is currently the mainstream method for manufacturing small- and medium-sized OLED displays, and are used to form red, green, and blue organic materials on glass or film substrates. And this metal mask has become very important for achieving thinner, lighter, higher resolution, and larger OLED displays.

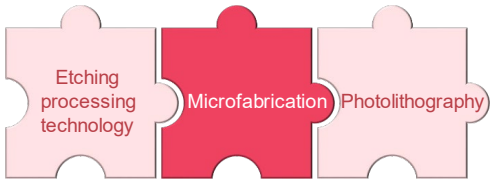
As a trend, demand is expected to grow this year as the percentage of OLED displays in smartphones is expected to exceed 50%, and furthermore, adoption will expand to tablets, notebook PCs, and automotive devices. Our customers, panel manufacturers, are also expanding their facility capacity.

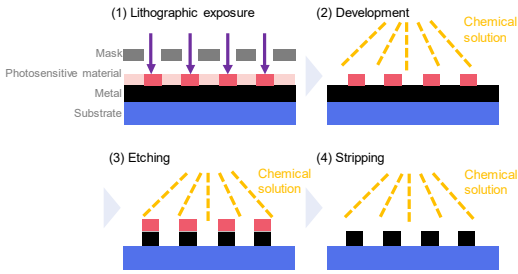
DNP manufactures high-definition metal masks using its proprietary photolithography and etching processing technologies, and has captured the top share of the global market, mainly for smartphones. We will continue to realize thinner, lighter and higher resolution displays and expand the possibilities of new applications utilizing flexible shapes to respond to realizing comfortable lifestyles.

DNP's Basic Technologies
Proprietary photolithography and etching processing technologies for realizing high-definition microfabrication

DNP

DNP's core technologies





Metal masks created by the technology of making "printing stamps"

In order to print more beautifully and clearly, we have refined the technology of making "plates" and improved it into a high-precision "microfabrication" technology.

Metal masks require a high level of precision in the positioning and size of holes.

DNP's highly accurate photolithographytechnology and wet etchingtechnology for metal are major strengths.

3

See page three.

DNP's basic technologies for manufacturing metal masks are its proprietary photolithography and etching process technologies for realizing high-definition microfabrication.

Metal masks were created by the technology of making printing stamps, and in order to print more beautifully and clearly, DNP has refined the technology of making plates and improved it into a high-precision microfabrication technology.

Metal masks require a high level of precision in the positioning and size of holes, and DNP's highly accurate photolithography technology and wet etching technology for metal are major strengths.

DNP's strengths

DNP

- **High-precision photolithography and etching processing technologies**
- **Superior technological development capabilities**
- **Extensive patents and know-how related to materials, manufacturing methods and products**
- **Ability to provide a stable supply of high-quality, high-definition products**

DNP began developing metal masks in 2001.
The company contributed to the development of OLED displays from their infancy to widespread use.

4

See page four.

What are DNP's strengths?

-High-precision photolithography and etching processing technologies.

-Superior technological development capabilities.

-Extensive patents and know-how related to materials, manufacturing methods and products.

-Ability to provide a stable supply of high-quality, high-definition products.

DNP began developing metal masks in 2001 and has contributed to the development of OLED displays from their the early stages to widespread use. And, backed by our high technological capabilities, our products have achieved the world's top market share.

Business Strategy

DNP

- **Invested approximately 20 billion yen to expand production capacity**
  - **Kurosaki Plant (Fukuoka Prefecture) production line began operation in May 2024**
  - **It supports 8th generation glass substrates with high production efficiency**
    - Acting in anticipation of the need for larger OLED displays
    - Optimizing Business Continuity Plan (BCP)

      Enabling a backup for the existing production site Mihara Plant (Hiroshima Prefecture)

* DNP news release dated June 12, 2024

Kurosaki Plant

8th generation metal mask (left), 6th generation (center, right)

5

See page five.

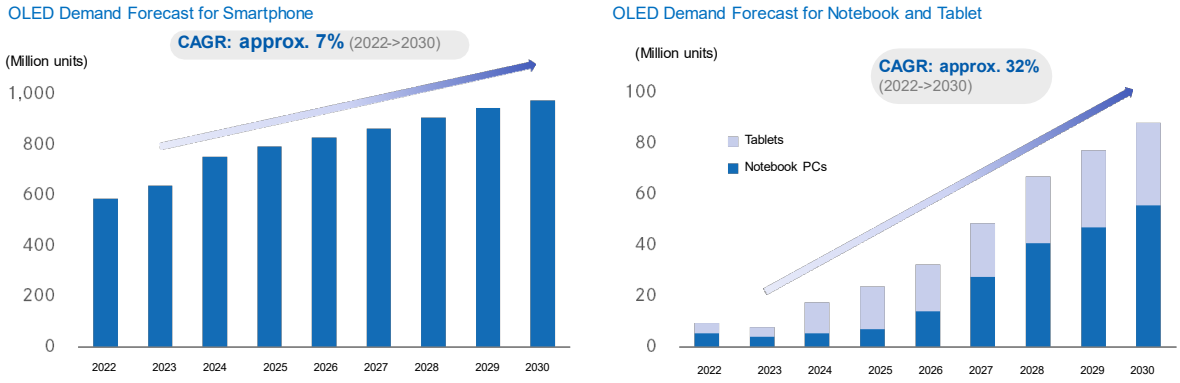
As a business strategy, in addition to anticipating the need for larger OLED displays, from the perspective of business continuity plan, we invested approximately JPY20 billion in the Kurosaki Plant in Fukuoka Prefecture, which started operation in May of this year, in addition to the existing Mihara Plant in Hiroshima Prefecture. This facility is adapted from the conventional 6th generation size to the 8th generation size to meet the needs for larger displays.

On the right is a photo of metal masks. Tens of millions of holes are made in this sheet, through which organic materials are deposited. The samples on the far right and in the center were made in the 6th generation, and on the left is the sample from the 8th generation.

Market environment

DNP

Expanded adoption of OLEDs for smartphones
Expanded use in tablets and notebook PCs expected in the future



Source: Omdia Display Long-Term Demand Forecast Tracker 4Q23

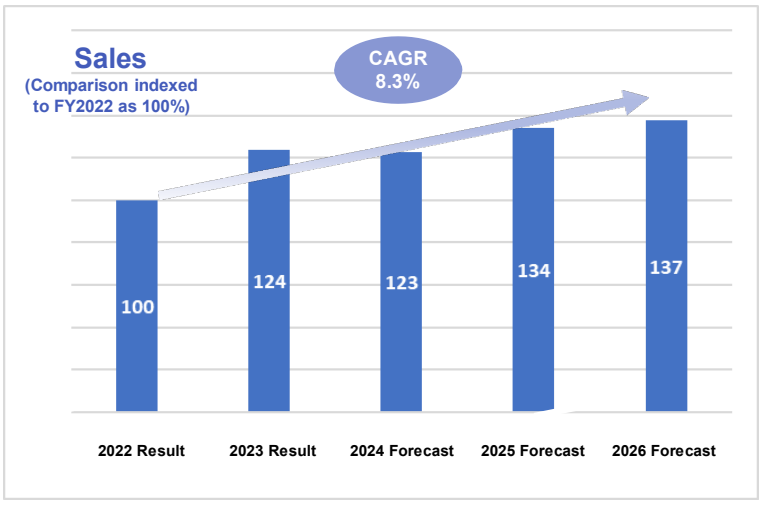
6

See page six.

The market environment is expected to continue to see a shift from LCDs in smartphones, with a CAGR of approximately 7% from 2022 to 2030, and growth of approximately 32% for tablets and notebook PCs.

Performance and Medium Term Plan

DNP



7

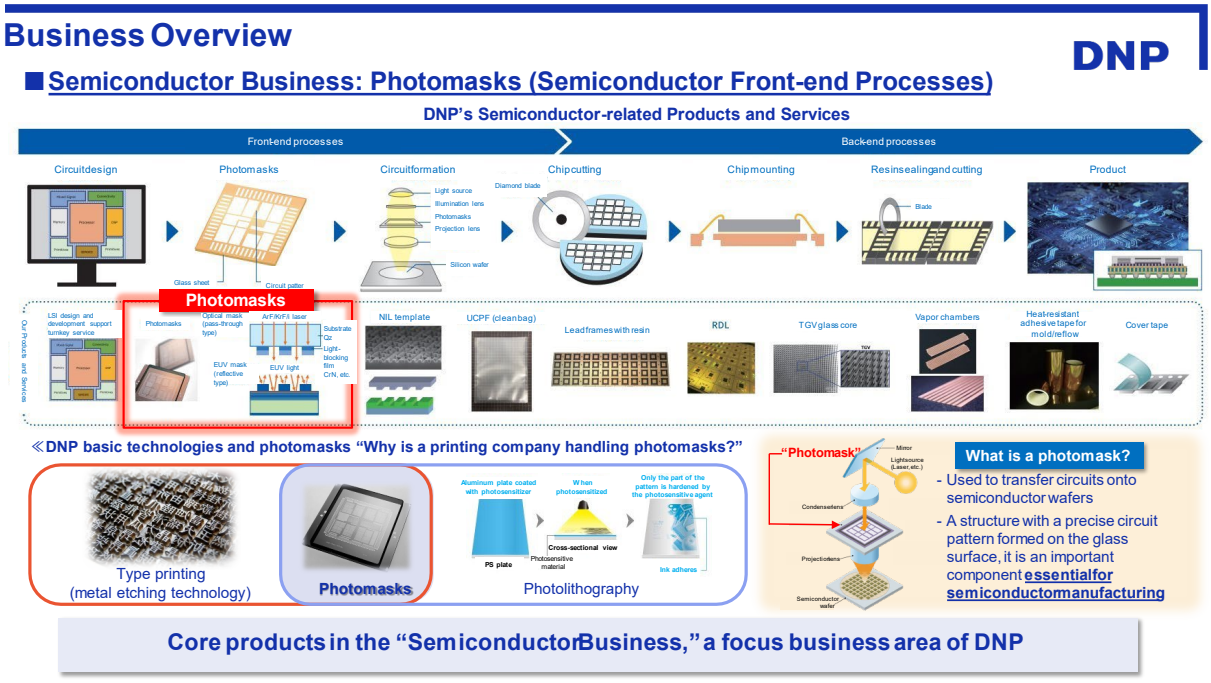
See page seven.

DNP plans a CAGR of 8.3%, which exceeds the growth rate of the market, by responding to changing displays in the future and providing a stable supply to the market.

That is all the explanation from me.

Wakabayashi: Thank you very much. Next, Corporate Officer Nakanishi will explain about photomasks and glass cores in "semiconductors," which is positioned as a growth-driving business.

Corporate Officer Nakanishi, please begin.



Nakanishi: I am Corporate Officer Nakanishi. I will now explain about photomasks and glass cores in "semiconductors" business. See page two.

The semiconductor process is broadly divided into the "front-end process" of making semiconductors and chips and the "back-end process" of making chips ready for the market. The Company offers products and solutions for a wide range of processes from front-end to back-end.

Among them, photomasks are a core product in our "semiconductors" business, used in the front-end process. As shown in the figure on the lower right, a photomask is a glass plate that acts like a photographic negative when a fine semiconductor pattern is transferred onto a semiconductor substrate using light, and a fine circuit pattern on the nm order is formed on that substrate.

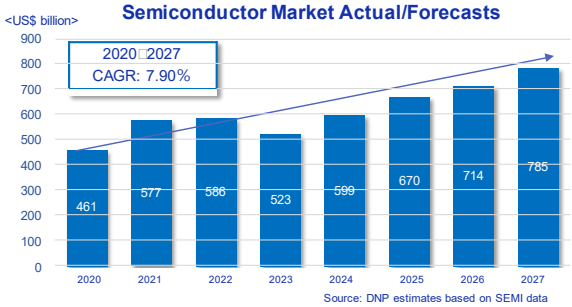
As shown in the lower left of the slide, we develop and manufacture photomasks by combining fundamental printing technologies of the microfabrication technology used to make the original printing plates, and the plate-making technology used to accurately transfer fine patterns.

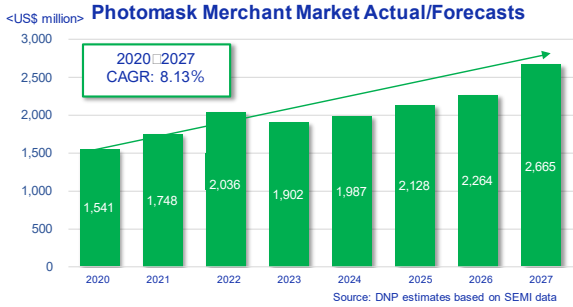
Business Environment

DNP

■ Market Trends

- The photomask market can be roughly divided into the "Captive" market, which targets semiconductor manufacturers' in-house production, and the "Merchant" market, which targets semiconductor manufacturers that do not have their own in-house production divisions





- The semiconductor market is forecast to expand at a CAGR of 7.9% from 2020 to 2027, driven by growth in AI-related technologies and automotive applications.
- The photomask merchant market is expected to grow at a CAGR of 8.13% from 2020 to 2027, surpassing the semiconductor market, due to strong capital investment by semiconductor manufacturers, backed by the forecast growth of the semiconductor market and aggressive attraction of semiconductor manufacturers in various countries.
- DNP's photomask business is targeting the "merchant market" for the time being
  - Going forward, DNP will expand its business into the captive market with new products

3

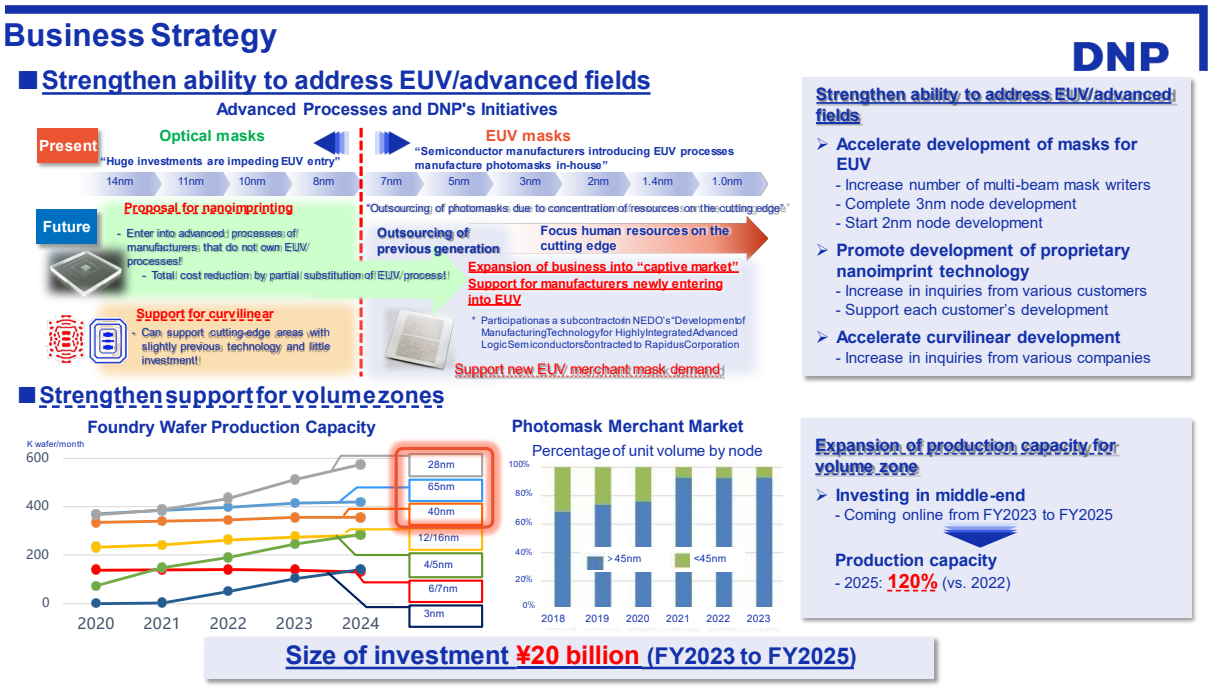
See page three. I will explain the market environment of the photomask business.

In the photomask market, there are two types of markets: the captive market, in which semiconductor manufacturers produce photomasks in-house, and the merchant market, in which semiconductor manufacturers procure photomasks from external suppliers. We operate our business in the merchant market.

The blue graph on the left shows the semiconductor market, which is expected to grow at a CAGR of 7.9% from 2020 to 2027, driven by the expansion of AI and automotive applications.

The graph on the right shows the trends in the photomask merchant market in which we operate. We expect the photomask merchant market to grow by 8.13% in line with the growth of the semiconductor market.

While primarily targeting the photomask merchant market, we aim to achieve even greater growth by providing value to the photomask captive market as well.



See page four. I will explain the basic strategy of our photomask business.

Our basic strategy is to concentrate our development resources in the advanced and cutting-edge fields to develop technology and make capital investments, and to actively make capital investments in volume zone fields with thicker line widths to secure capacity.

The top half of the document explains the advanced and cutting-edge fields. The right side of the red vertical dotted line is the cutting edge field using a process called EUV or Extreme Ultraviolet. In this field, we have completed the development and marketed photomasks for the cutting edge 3 nm node semiconductors currently in mass production worldwide.

We are already working on the development of the next 2 nm node, and through Rapidus Corporation in Japan, we are participating as a subcontractor in NEDO's development of manufacturing technology for highly integrated advanced logic semiconductors. We will provide value by supplying EUV masks to semiconductor manufacturers who are entering the EUV field in the future, allowing them to concentrate on chip development and manufacturing.

For customers who manufacture EUV masks in-house, we can contribute to total cost reduction by replacing a part of the process with the nanoimprint process, which we will explain later.

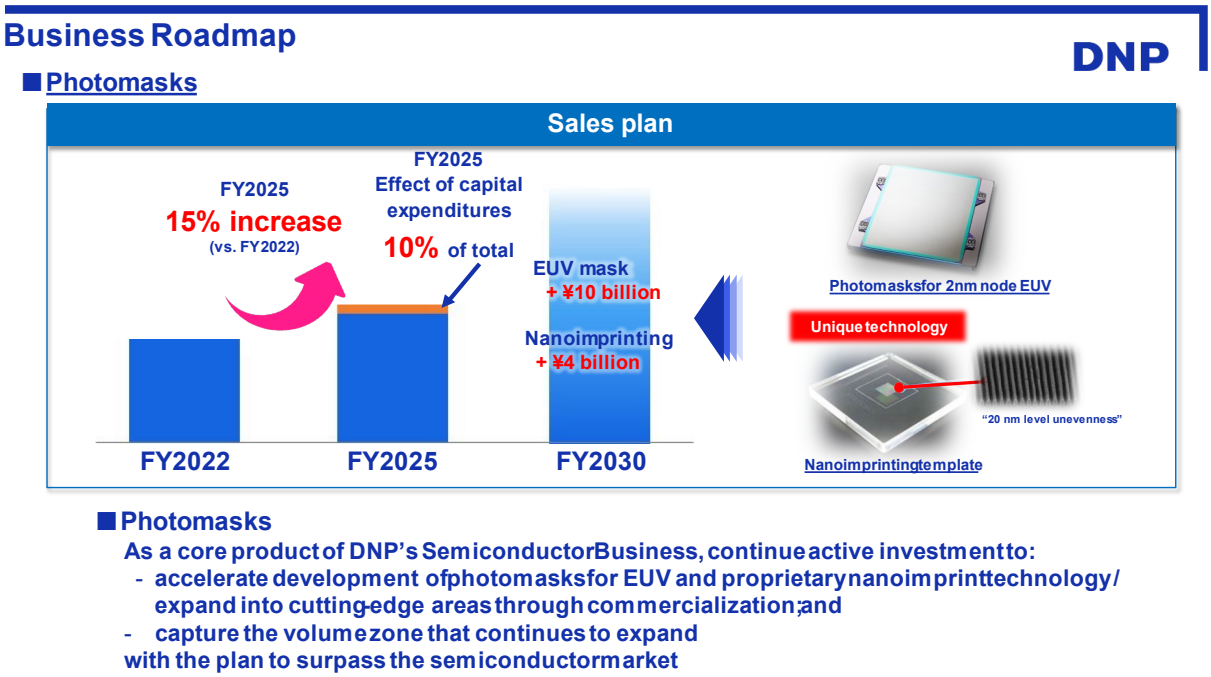
The left side of the red dotted line is the advanced field without EUV. The smallest line width in this field is 8 nm generation. We bring to this field the technologies of nanoimprinting and curvilinear, which enable the fabrication of smaller line width semiconductors in a proven, experienced process.

Nanoimprinting forms circuit patterns by physically pressing a substrate with microscopic bumps on its surface. This technology makes it possible to combine multiple semiconductor processes into one, contributing to lower cost and carbon neutrality in semiconductor manufacturing.

Curvilinear is a technology that forms special, complex patterns on a photomask that are not actually transferred, so that the patterns interact with each other when the customer exposes with the photomask to form higher definition circuit patterns.

The lower half of the screen explains the volume zone. In terms of volume, we expect that the volume zone for the time being will be 65 nm to 28 nm, which is thicker in line width than advanced semiconductors. We will concentrate investment in this field and increase production capacity by about 20% from 2023 to 2025.

We will invest JPY20 billion over three years from the volume zone to the cutting edge.



See page five. The following is an explanation of the business results that will be achieved through these strategies.

As the graph shows, we will increase sales by about 15% from 2022 to 2025. Of that amount, 10% is due to new capital expenditures. In addition, we aim to increase sales by JPY10 billion through EUV masks and JPY4 billion through nanoimprinting in FY2030.

In summary, the photomask business, as the core product of DNP's Semiconductor business, will expand business in advanced fields by concentrating development investment in photomasks for EUV and nanoimprinting, a proprietary technology, and by accelerating development and commercialization.

At the same time, we aim to outpace the growth of the semiconductor market by aggressively investing in facilities and securing production capacity in the volume zone for thicker line widths than in the advanced field.

Next, I will explain the glass cores currently under development. Please see page two.

Glass core are substrates used in the back-end chip mounting process of semiconductors. We are selling lead frames as a product for the chip mounting process. Lead frames are components used for mounting semiconductors with thick wire widths, while the glass cores we will discuss today are components used for cutting-edge semiconductors with thin wire widths.

The "core" of the glass core is the base substrate that supports the semiconductor chip. Currently resin is used as a core. As semiconductor chips become finer-wired and larger-sized, they require cores with higher flatness and less warpage, and glass is attracting attention as a material that can achieve this.

The glass requires the formation of fine, high-density through-hole electrodes that connect the front and back surfaces. We have developed glass cores by combining the microfabrication technology we have cultivated in photomask manufacturing and MEMS manufacturing with the handling technology for large, thin glass we have cultivated in the manufacture of color filters for LCDs.

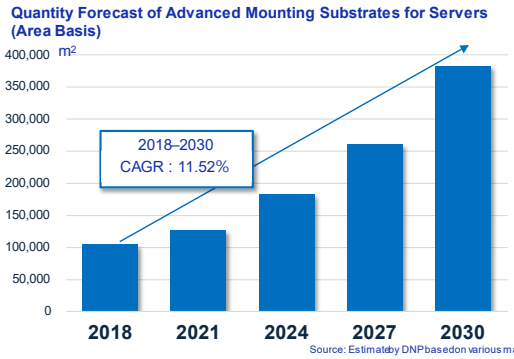
As a product that provides value to the back-end process of semiconductors, we will continue to develop this business as a driver of our next-generation growth.

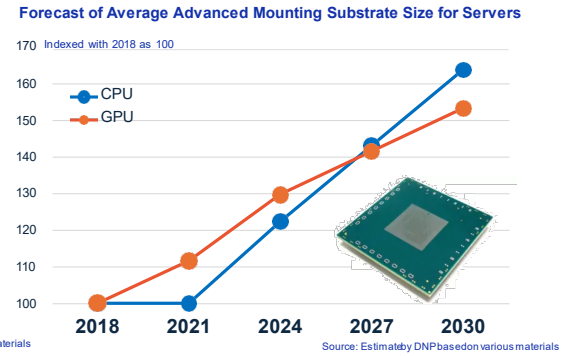
Business Environment

DNP

Market Trends

- Against the backdrop of advances in AI and the expansion of chiplets, mounting substrates for advanced devices continue to grow in size
- Glass core demand is expected to increase as "warpage and flatness" become an issue with larger substrates
- Server applications will progress the most with the increase in size of mounting substrates, which is behind the growth in glass core demand
- DNP's business target is the market for advanced mounting substrates for high-performance devices (CPUs/GPUs) used in servers





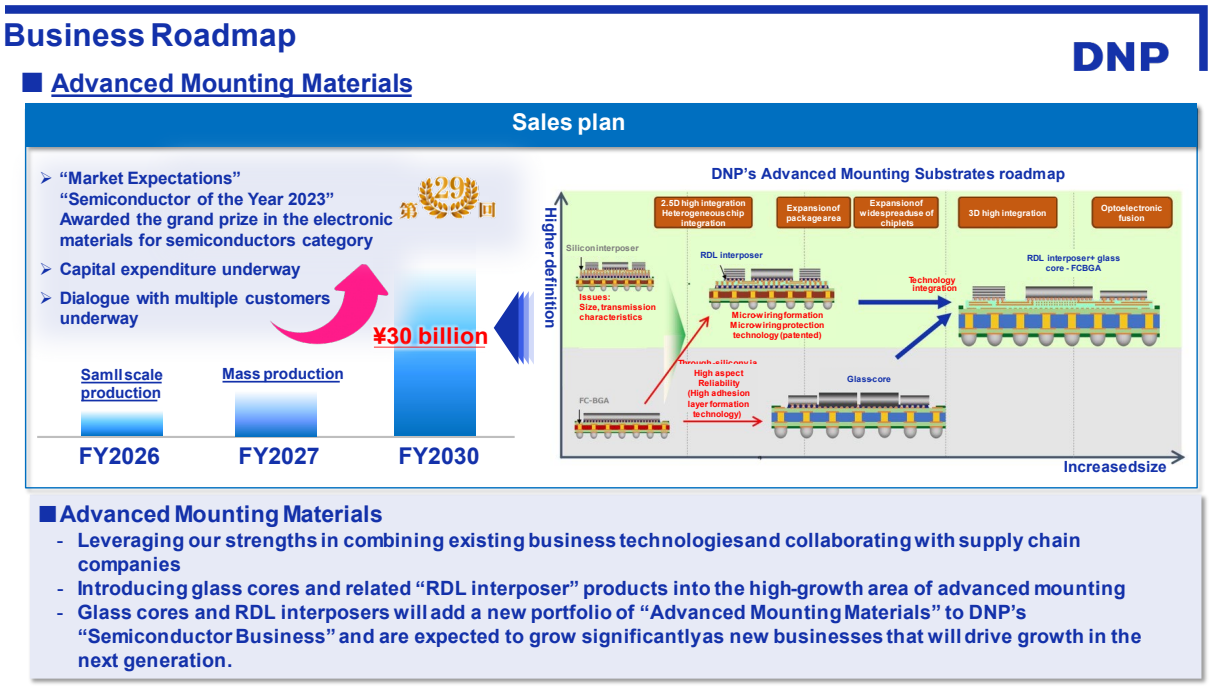
- Total area of advanced mounting substrates for servers is projected to expand at a CAGR of 11.52% from 2018 to 2030
- The glass core market is expected to expand in proportion to the increase in the size of advanced mounting substrates (= package size)

3

Please see page three. This is an overview of the market environment for glass cores.

The graph on the left shows the growth of semiconductor mounting boards for servers in terms of area. The total area of a mounting board increases, of course, because the number of semiconductors increases, but also because the area per semiconductor becomes larger. The drive for larger semiconductor area is driven by advanced CPUs, GPUs, and other high-performance devices for servers.

The graph on the right shows that the area of CPUs and GPUs grows larger every year. We believe that as the area of semiconductors increases, the need for glass cores with high flatness and low warpage will increase, and we are developing such glass cores.



Please see page four. I would like to explain the performance trends of glass core.

Our glass cores won the Grand Prix for "Semiconductor of the Year" in 2023, and we have realized the great expectations from the market. We have already begun to invest in facilities while promoting dialogue with several customers, and will begin small-scale mass production in FY2026 and mass production in FY2027.

Although we have not explained in detail today, we plan to add these advanced mounting materials to our "semiconductor-related" business portfolio along with RDL (rewiring layer) interposers, which we are developing in parallel, and to grow the advanced mounting materials business to annual sales of JPY30 billion by FY2030.

That is all from me. Thank you.

Wakabayashi: Next, Managing Executive Officer Iida will explain about the battery pouch, "High Performance Materials for Mobility and Industrial Applications", which is positioned as a growth-driving business. Managing Executive Officer Iida, please.

DNP

1. Battery Pouches

2. Electric Vehicle (EV, PHEV) Market Trends

3. Battery Pouches Business Plan

4. Battery Pouches Business Strategy

5. Other Products from Industrial High-Performance Materials

- Photovoltaic module components

2

Iida: My name is Iida, and I am in charge of the battery pouch-related business.

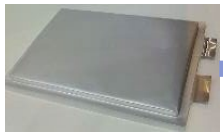
I will explain the market trend of battery pouches, our business plan and business strategy, and then touch on the status of our solar cell related product initiatives.

What Are Battery Pouches?

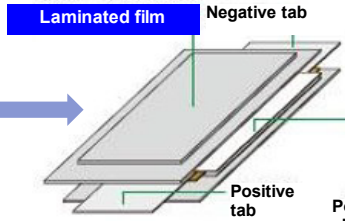
DNP

◆Product image

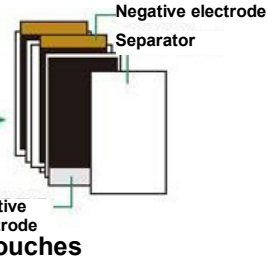
- Battery cell



- Laminated cell structure



- Laminated electrode



◆ Product lineup

◆ Functions required of pouches

- To prevent electrolyte leakage
  High sealing and airtightness
- To prevent water from entering from outside
  High water vapor barrier property
- To increase battery capacity
  High moldability
- To support high voltage and large batteries
  High insulation
- To ensure stable operation in harsh environments
  Heat resistance and stability at high temperatures

3

Please see page three.

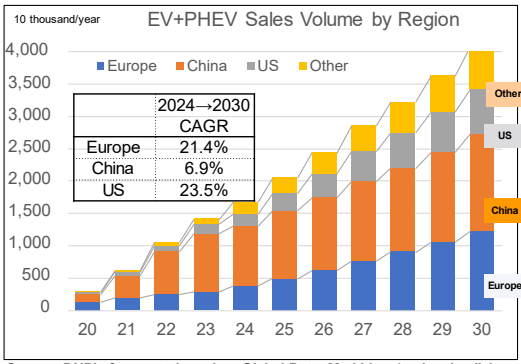
A battery pouch is the outer packaging material of a lithium-ion battery and serves to protect the contents of the battery. Lithium-ion batteries, in particular, contain a solvent-based electrolyte, which must be kept from leaking out over a long period of time, from water, etc. entering from the outside, and require high insulation.

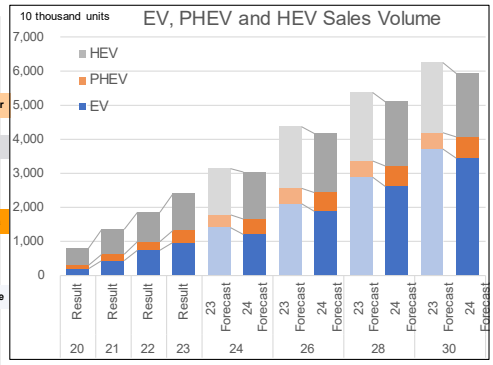
The battery pouch plays a very important role in the long-term stable operation of the battery. Applications include mobile IT applications such as smartphones, tablets, and laptop, as well as electric vehicle applications.

Please see page four.

Our battery pouches are highly regarded in the industry for their long track record and high reliability, and we have the top share of the global market.

Electric Vehicle (EV, PHEV) Market Trends





DNP

[Revisedratio of estimated volumecomparedto last year]

	2024	2026	2028	2030
EV	-27%	-24%	-21%	-20%
PHEV	18%	15%	11%	12%
HEV	12%	11%	12%	10%

EVs revised downward, but PHEVs and HEVs revised upward

Companies are shifting from an EV-centric strategy to a diversified strategy of PHEV and HEV.

Source: DNP's forecasts based on Global Data, MarkLines/national policies, automaker press releases, etc.

■ **The major trend of electrification of automobiles (EVs and PHEVs) remains unchanged.**
However, electrification is expected to progress from multiple angles, including HEVs and PHEVs, and the shift to EVs will continue until EV recharging facilities are in place, the number of models increases, and prices become more affordable.

■ **Although growth of EVs is slowing down, HEVs and PHEVs are expected to grow and contribute a certain amount to the growth of pouches.**
2025: Approx. 13.5 million EVs, approx. 4.6 million PHEVs, approx. 17.2 million HEVs, EV+PHEV ratio of approx. 19%
2030: Approx. 30 million EVs, approx. 5.3 million PHEVs, approx. 21.5 million HEVs, EV+PHEV ratio of approx. 35%

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Please see page five. We will explain the market trend of electric vehicles.

Recent trends indicate that the growth of electric vehicles is slowing down, especially in Europe and the United States, but we see no change in the major trend toward electrification.

We expect EVs to grow steadily as charging facilities for electric vehicles, or EVs, become available, the number of models increases, choices increase, and prices become closer to those of gasoline-powered vehicles. In addition, we expect that the transition will not be solely to EVs, but that progress will be made from multiple angles, including PHEVs and HEVs, and that the transition will eventually be to EVs.

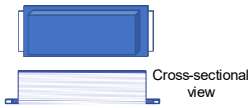
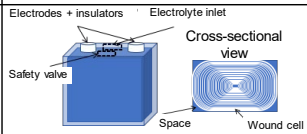
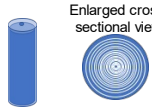
Under these circumstances, the market forecast for electric vehicles has been changed compared to last year's forecast. See the table at the top right for the revised percentage of volume estimates compared to last year. For EVs, we expect a negative growth of more than 20% compared to last year, while PHEVs and HEVs are expected to show positive growth of nearly 10% to 20%.

Also, as we will discuss in more detail later on the impact on our battery pouches, the slowdown in EVs has slowed the recent growth in pouch volume. However, the pouch type is also used in PHEVs and HEVs, and we expect a certain contribution if the number of these types increases further in the future.

Comparison of Three Battery Types Applied in Automotive Applications

DNP

[Overview] Pouch-type batteries, which are lightweight, have a low risk of contamination, and do not require a complex BMS, are widely used in automotive applications.

	Pouch	Prismatic	Cylindrical
			
Cell	Few parts, **low cost**	Many parts, **high cost**	Standardized, general purpose, **low cost**
Internal structure	Stacked / vacuum sealed	Wound / space in the corners of the container	Wound
Specific energy density by weight	**Light** : 200-300 Wh/kg	**Heavy**: 80-240 Wh/kg	Light : 200-300 Wh/kg
Airtightness	PP resin seal	Welded	Clamped
Safety valve structure	Sealing parts	Partial metal notching process	Resin parts
Countermeasures against foreign contaminants in container	Produced in a clean environment. Cleaning process not required	Cleaning process after metal processing	Cleaning process after metal processing
Advantages and disadvantages of modularization	**[Advantages]** - Thin, large-area cell structure provides excellent heat dissipation efficiency. - Easy cell insertion in production process - Easier electrolyte filling and degassing than Prismatic **[Disadvantages]** - Rigidity required for module structure.	**[Advantages]** - Rigidity of battery cell allows simplification of module structure. **[Disadvantages]** - There are empty spaces inside the battery cell, which is disadvantageous in terms of energy density by volume. - Electrolyte injection and electrolyte penetration takes time in the production process.	**[Advantages]** - Low load per cell Approx 6,000 cells in one EV **[Disadvantages]** - Advanced BMS required (BMS:Battery management system)  21.5% empty space is created when cylinders are combined to form modules $1-\frac{\pi R^2}{(2R)^2}=1-\frac{\pi}{4}=21.5\ \%$

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Please see page six.

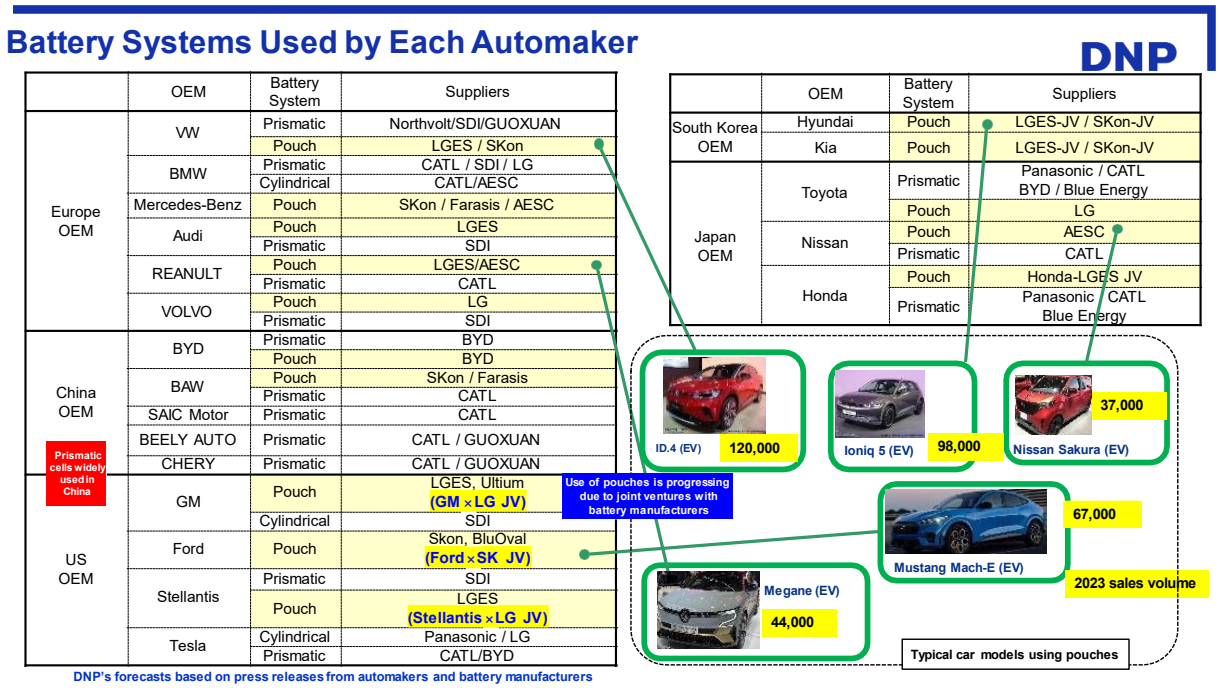
There are three major battery types, and each coexists in automotive applications. Each of these cases will be briefly explained. Incidentally, the majority of mobile applications are currently using pouch-type batteries due to the advantages of thinness and lightness. In contrast, three types of exterior systems are used for automotive applications, each with its own pro and cons.

First, the pouch type on the left side of the page. It is characterized by its thinness, light weight, and high heat dissipation efficiency. In addition, the electrodes are stacked one on top of the other, a method called stacking, which provides excellent weight-energy density. However, the module structure must be rigid.

Next is the prismatic type in the middle of the page. It is rigid and can simplify the module structure. It is widely used in China, partly because it is easy to handle. The electrode is wound around the can and set in the can, which inevitably creates a space between the electrode and the can, resulting in a disadvantageous volumetric energy density.

The last one is the cylindrical type on the right side of the page. This one is standardized and is characterized by low cost and high energy density. However, when thousands of batteries are required for a single EV, the BMS (Battery Management System), which precisely controls each battery, becomes more complex. Tesla has adopted this system and has cleared this point, but it is said to be highly challenging.

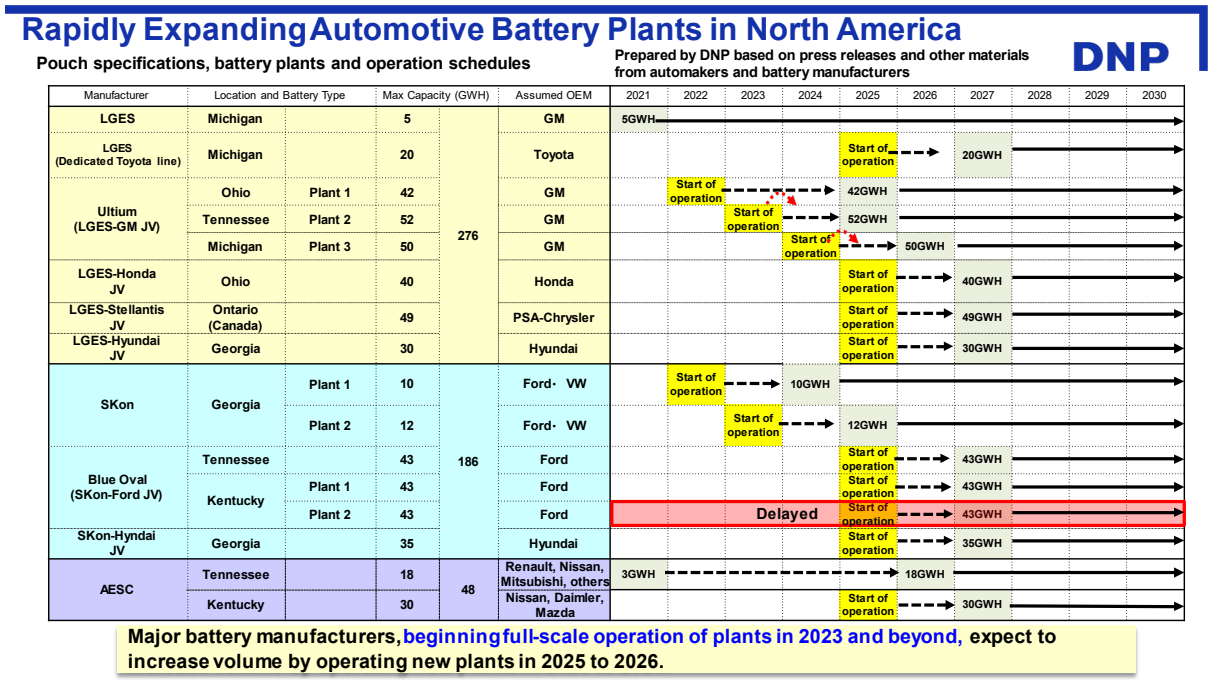
The pouch type has approximately 20% to 30% of the market share for each method, and prismatic type has the largest share, estimated at over 50%, due to the fact that it is widely used in China. The rest are cylindrical types. In order to extend the strengths of pouches and overcome their weaknesses, we are improving current-generation and developing next-generation pouches that are different from the current ones.



Please see page seven. This is a description of the batterysystems for each automobile manufacturer.

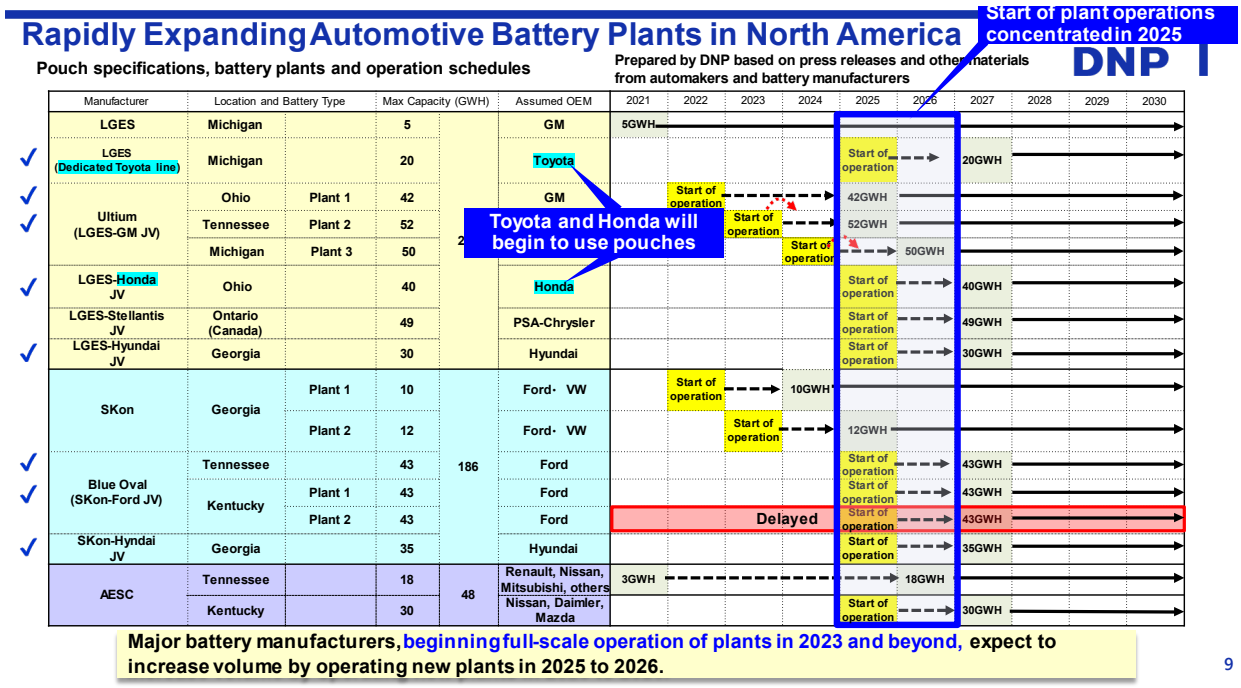
As explained earlier, the situation in China is dominated by prismatic type, while the pouch type is widely used in Europe and the United States. In particular, it is expected to be increasingly adopted in the US in the future.

In the US, automakers and battery manufacturers often establish joint ventures, with the automakers themselves involved in and investing in battery manufacturing. Examples are GM x LG JV, Ford x SK JV, etc. In other words, the automakers themselves are prepared to be involved in battery production, and it is expected that they will give priority to the operation of this line in the future. One of our major strategies is to firmly penetrate ourselves into here, and we have a plan to increase our pouch volume in the US in the future.



Please see page eight.

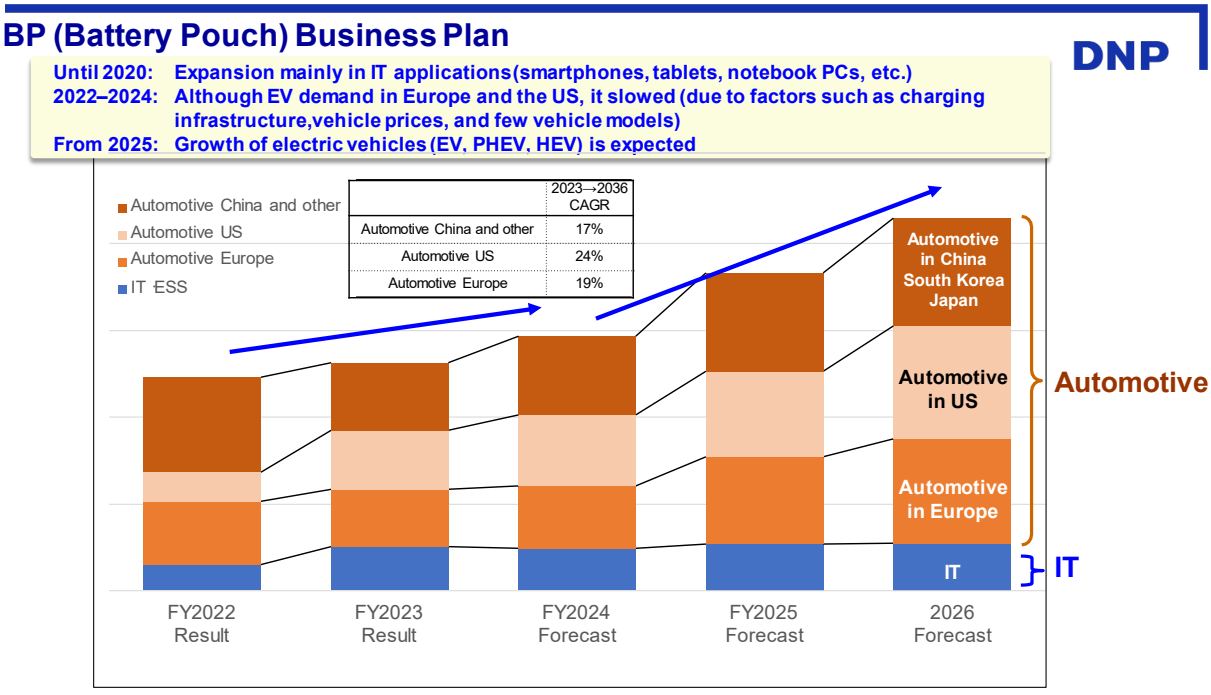
In the US, Ultium, a joint venture between GM and LG, and the Georgia plant of SKon of Korea have begun full-scale operations from 2023 onward.



Please turn to page nine.

The recent slowdown in EV growth has led to the postponement of new plant construction and construction on hold. However, the plants marked with a tick in the table are being promoted to go on line in 2025 to 2026. Even if these are somewhat further postponed, etc., there is still a lot of demand for pouches.

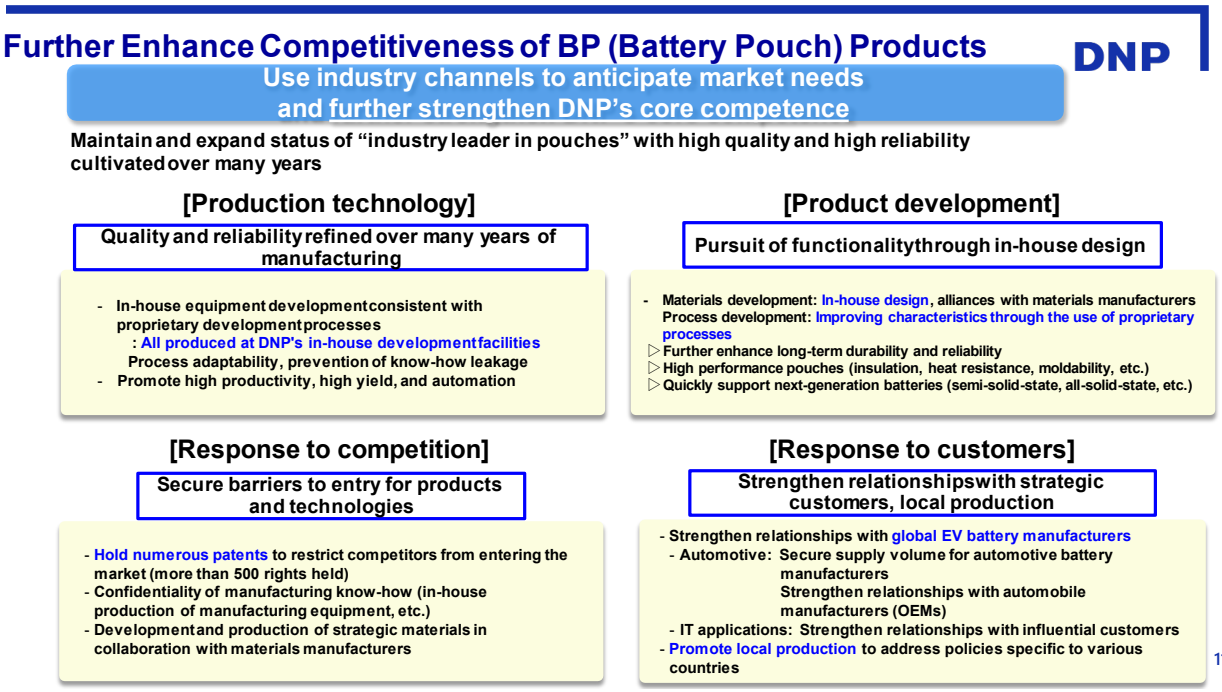
I have also heard that these plants are being modified to be able to manufacture batteries not only for EVs, but also for PHEVs and HEVs. This response will complement for the slowdown in EV demand, which is expected to lead to a stable increase in pouch demand.



See page 10. The business plan for the battery pouch will be explained.

Until 2020, the expansion has been focused on smartphones, tablets, laptop, and these IT applications. Subsequently, in-vehicle applications have increased, with in-vehicle applications now accounting for 70% to 80% of the total.

Currently, EV applications in Europe and the US are slowing down, but year 2025 onwards, we expect another growth of EVs, and then PHEVs and HEVs will also increase, with an annual growth rate of 15% to 20% for pouches.



Please see page 11. This is about the competitiveness of battery pouch products.

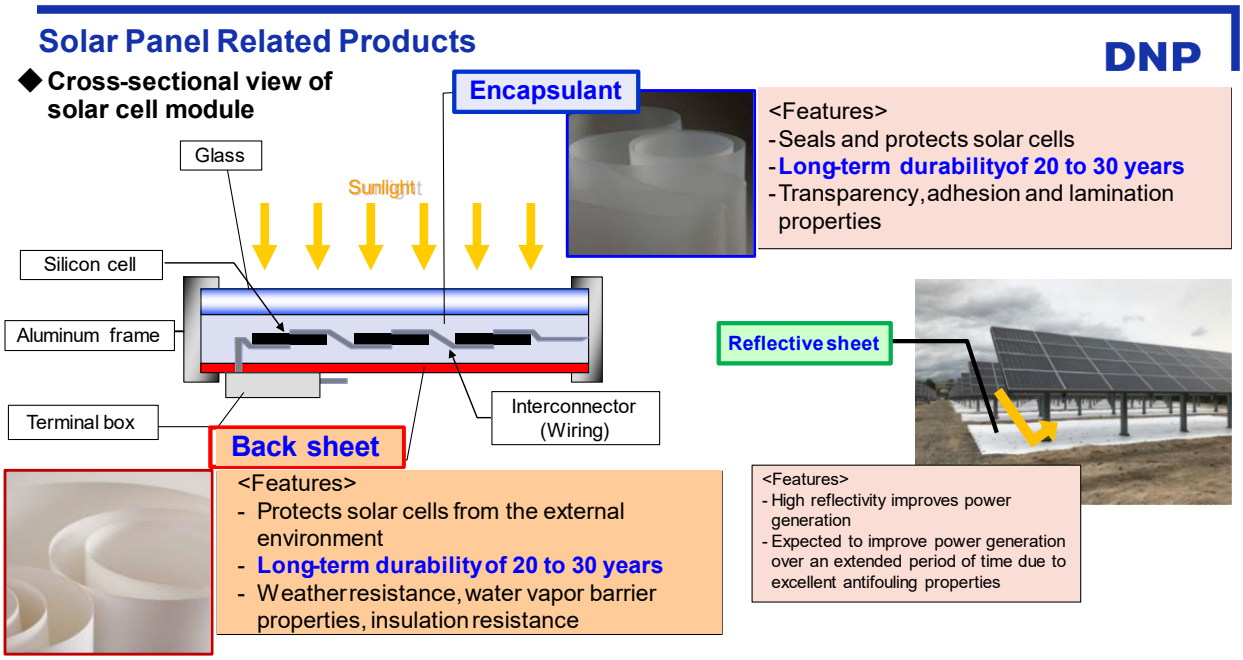
First of all, regarding production technology, we have a proprietary development process, and the main equipment is in-house developed equipment. This prevents the outflow of know-how.

In the area of product development, we design our own materials and form special alliances with material manufacturers, taking great care to avoid technology leakage. In addition, the pouch method is said to be advantageous for all solid-state batteries, which are promising as next-generation batteries. We are putting a lot of effort into this development.

The next is our action to competition. We hold more than 500 patents, which we will use to discourage other companies from entering the market.

Regarding response to customers, we will consider local production in accordance with the policies of each country. This process, which we call the post-processing, slitting to the width requested by the battery manufacturer, is already being done in China and Denmark in Europe. We have also acquired real-property in the US and are making preparations for future production.

As mentioned above, the recent slowdown in the growth of EVs has affected our battery pouch business, but we do not see any change in the major trend of electrification of cars. Therefore, there is no change in policy, and we plan to take action as we determine the timing.



Please see page 12. Today, I also would like to explain another commercial product.

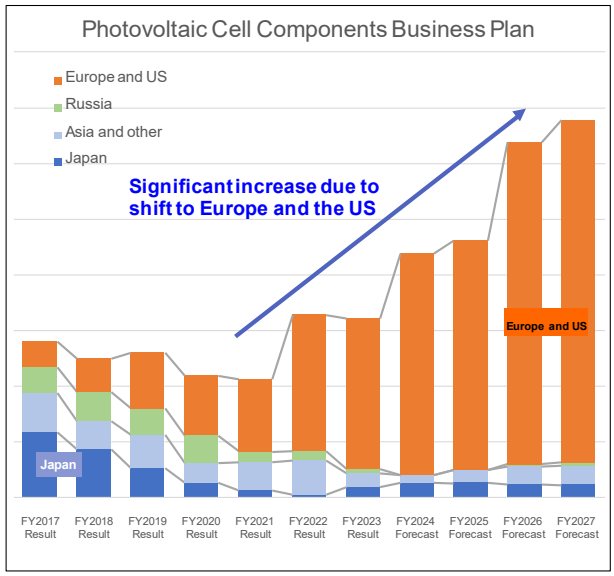
One of our growth businesses is a product category called "High Performance Materials for Industrial Applications." Battery pouches are one of these High performance materials, but there are other promising products.

Solar cell-related products are categorized in the promising products. This is a cross-sectional view of a solar cell module, and we are engaged in two main products. They are called "encapsulants" that protect silicon cells for solar cell power generation and "back sheets" that avoid entering water and other substances from entering from the external environment. Our products are expanding due to high reputation of superior long-term durability from the market.

Also, DNP's recently press-released "reflective sheet" is on the right side of the page. This product is laid on the ground and returns sunlight hitting the reflective sheet to the power generating cells, thereby increasing power generation efficiency. Adoption of this new product is also increasing.

Solar Panel (PV) Related Business Plan

DNP



While domestic PV manufacturers are withdrawing from in-house manufacturing, DNP has succeeded in shifting to Europe and the US, leveraging its high reliability and high quality.
- Significant sales increase expected
Expect to double the 2021 level in 2024.
- Facility expansion plan
New facilities will be installed in 2025 to increase production capacity

✓ Build a production system to meet robust demand in the US
- Acceleration of PV installation due to the Inflation Reduction Act (IRA)
- Decrease in competitiveness of Chinese products (strengthened safeguards)

✓ Respond to increasing demand in Europe
- Formulation of EU Solar Strategy.
Target 600 GW in new installations by 2030

13

Please see page 13. The graph here shows actual sales and future plans for solar cell-related products.

Traditionally, we have supplied mainly to domestic solar cell manufacturers. However, the domestic market has been shrinking due to the withdrawal of domestic manufacturers from in-house production.

We are approaching solar cell manufacturers in Europe and the US based on the results we have achieved in Japan, and expect to double our sales this year compared to 2021. Due to these strong demands, we plan to expand further by installing new facilities in the next year, 2025.

This is all for the explanation of our efforts today in two products that contribute to the realization of a decarbonized society: battery pouches for lithium-ion batteries and solar cell-related products.

Wakabayashi: Thank you very much. Next, Sugimoto, Senior Executive Corporate Officer, will explain the new business field of medical and health-related products. Senior Executive Corporate Officer Sugimoto, please.

DNP

DNP's Medical and Healthcare Business

Commercial on DNP's initiatives in the medical area
"DNP is manufacturing capsule medicine?"

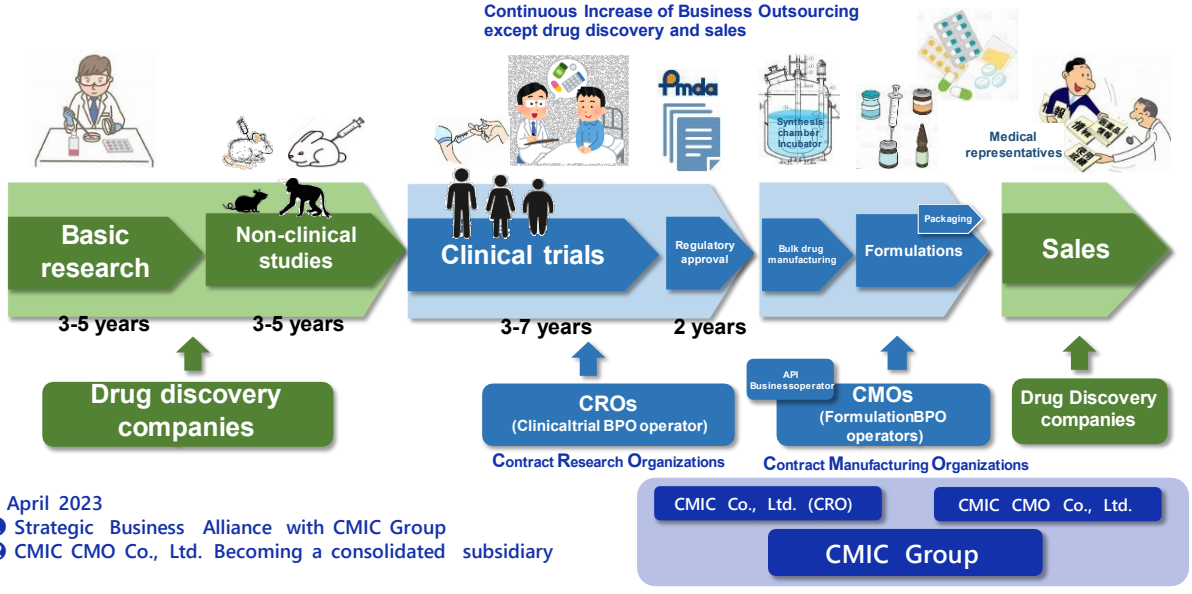
2

Sugimoto: My name is Sugimoto, and I am in charge of DNP's medical healthcare business. Today, I will explain the overall picture of DNP's medical & healthcare business.

On page two, you can see an image of a recent DNP TV commercial. I would like to explain how we, as a printing company, are thinking about developing our business by placing areas related to pharmaceuticals at the center of our medical healthcare business, including the manufacture of medicines themselves.

Business Flow of the Pharmaceutical Industry, Development, Manufacturing, and Sales
~ Increasing "Horizontal Division of Labour" in the Pharmaceutical Industry

DNP



■ April 2023
❶ Strategic Business Alliance with CMIC Group
❷ CMIC CMO Co., Ltd. Becoming a consolidated subsidiary

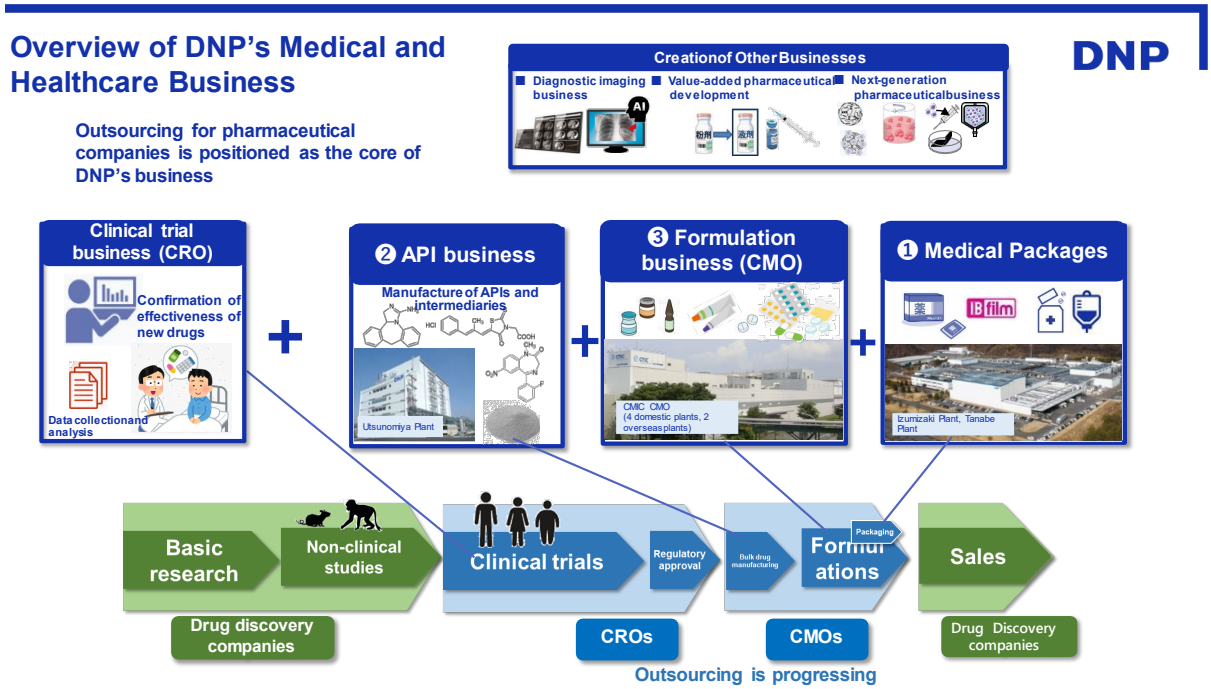
3

This page shows the flow of pharmaceutical products from development to manufacturing and marketing.

The pharmaceutical industry has been undergoing a horizontal division of labor for the past 20 years or so. For the area shown in green in the figure, which is the area of drug development itself, and the area behind it, which is the area related to the marketing of drugs, drug companies you are all familiar with, or rather, drug discovery companies to develop drugs, perform in-house.

In many cases, the areas of "clinical trials" and "regulatory approval," which are the areas of confirming the efficacy of drugs and obtaining approval from the government (indicated in blue in the middle), are outsourced to specialized contractors called CROs, while the areas of manufacturing drugs, or "drug formulation," are outsourced to specialized contractors called CMOs.

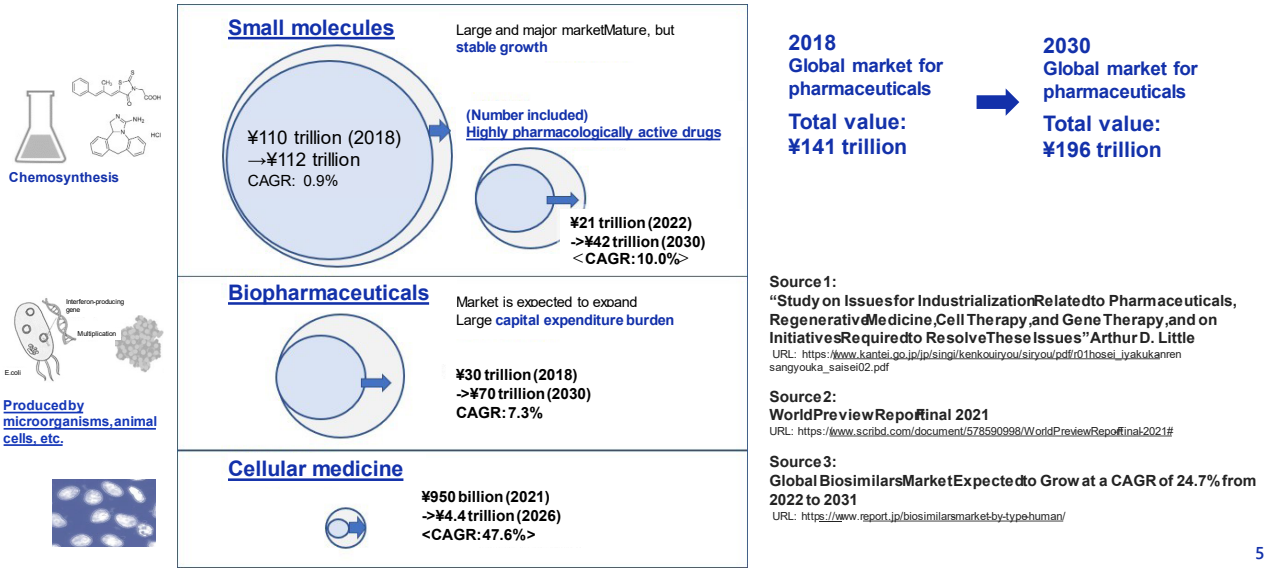
CMIC Group is a leading Japanese pharmaceutical outsourcing provider with both CRO and CMO functions. In April last year, DNP and CMIC Group agreed to form a strategic business alliance and CMIC CMO became a consolidated subsidiary of DNP.



This page provides a brief overview of DNP's medical healthcare business.

DNP's three core businesses are the "medical package business" in which DNP excels, the "active pharmaceutical ingredients (APIs) business" that started more than a decade ago, and the "drug formulation business" that was acquired last year when CMIC CMO was made a consolidated subsidiary. These businesses are the areas of manufacturing which drug discovery companies outsource, and form the core of DNP's medical healthcare business.

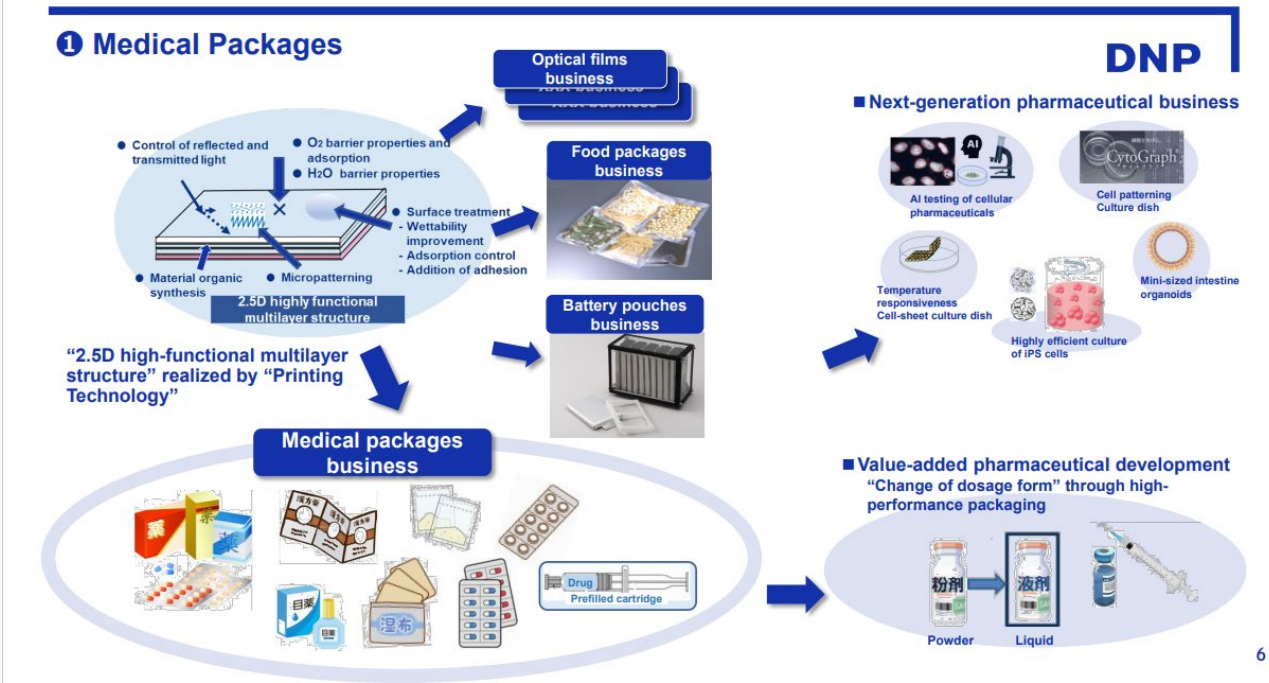
In the clinical trial outsourcing business, known as CRO, DNP will collaborate with the CMIC Group to commercialize this business as DNP, and will also aim to build businesses that will dramatically increase the added value of existing pharmaceutical products by combining diagnostic imaging business, which DNP has been involved in for some time, packaging technologies and drug formulation technologies. We will also aim to build businesses related to regenerative medicine, etc.



This page explains the expansion trend of the global pharmaceutical market.

In 2018, the global pharmaceutical market size was JPY141 trillion, and it is expected to grow to JPY196 trillion by 2030.

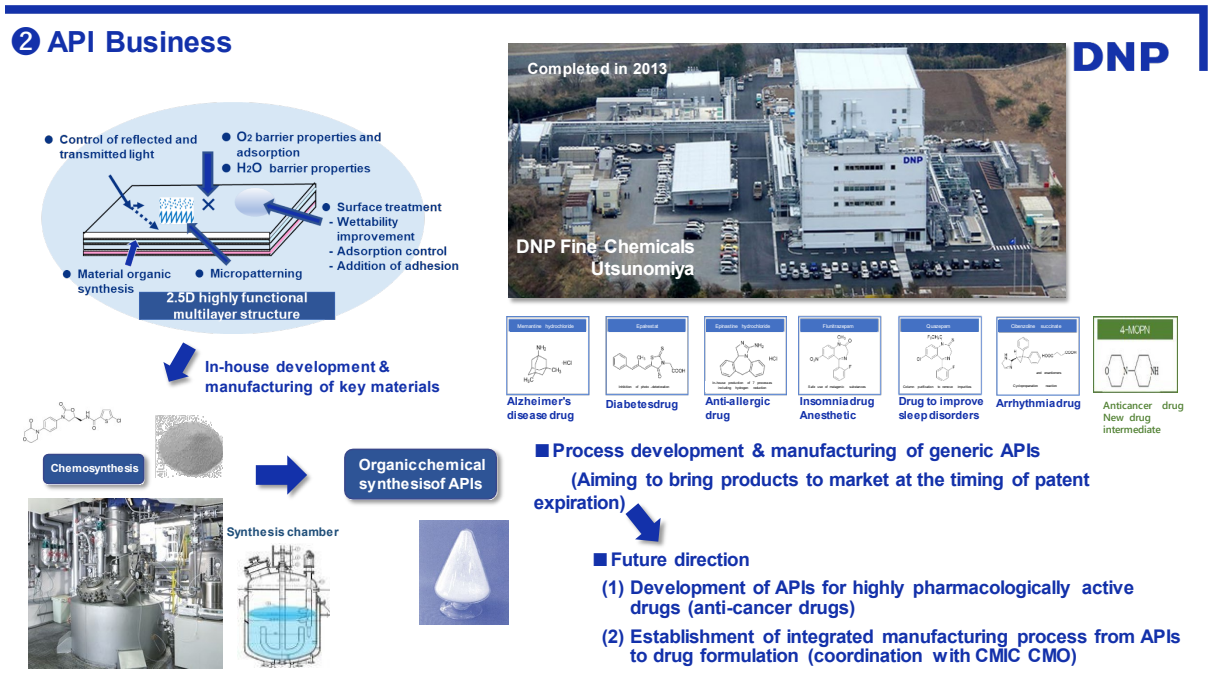
So-called "small molecule drugs" manufactured by chemical synthesis have a high weighting in the market, and in particular, highly pharmacologically active drugs, so-called anti-cancer drugs, are said to show high growth among small molecule drugs in the future. We believe that this area of small molecule drugs will be the core of DNP's pharmaceutical manufacturing, but we will also aim to build businesses in the fields of "biopharmaceuticals", which are expected to expand greatly by 2030, and "cellular medicine", which we have been involved in for more than a decade.



DNP has developed a simple two-dimensional printing technology to realize a multilayer structure in which each layer has its own unique function, which I call 2.5D highly functional multilayer structure. By realizing this structure, we have been involved in many businesses, such as the optical film business, the "food packages business" aimed at significantly improving shelf life, and the "battery pouch business."

We have applied this technology to the medical field in our "medical packaging business," which includes not only pharmaceutical products but also packaging for some medical devices. We also aim to add value to anti-cancer drugs and other products by combining CMIC CMO's formulation technology with this packaging technology.

Meanwhile, DNP has been sending engineers to research institutes and hospitals conducting research on regenerative medicine and cellular medicine for about 20 years to learn about next-generation drug development, and we are aiming to build a new business in this area as well.



One of DNP's core manufacturing technologies is the "processing technology" to realize the "highly functional multilayer structure" mentioned above. In 2013, we built a new plant in Tochigi Prefecture equipped with a "chemical synthesis process" and began developing and manufacturing raw materials that are the basis for processing.

In addition to the development and production of raw materials used in multilayer structures, we have also begun the development of bulk pharmaceuticals. We have started the bulk pharmaceuticals business by chemically synthesizing APIs for pharmaceuticals, the patents of which are about to expire in a few years using our proprietary manufacturing process and supplying them to generic drug manufacturers.

Currently, we have about seven products in our product lineup, and in the future we will strive to expand the variety of products with a view to developing and manufacturing anti-cancer drugs, etc. We will also aim to establish an integrated production process from drug substance to drug product in cooperation with CMIC CMO, which is in charge of the manufacturing process.

❸Formulation Business

DNP

■ **Made CMIC CMO a subsidiary in April 2023**

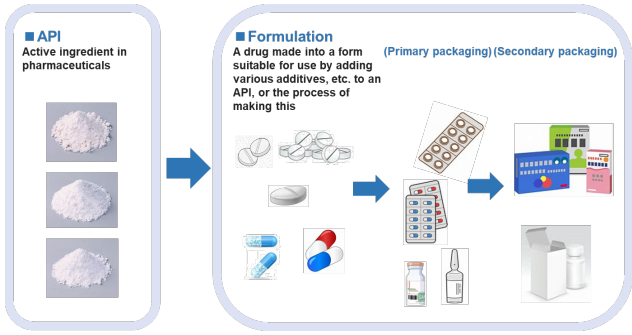
- One of the core businesses of **CMIC HOLDINGS Co., Ltd.**, **Japan's largest BPO provider* for drug discovery companies** along with **CMIC Co., Ltd.**, which operates a **CRO business**

■ **CMIC CMO Co., Ltd.**

- **Third largest CMO operator** in Japan

◎**6 manufacturing sites**
- **Japan: Toyama Plant, Shizuoka Plant, Ashikaga Plant, Nishine Plant**
  : More than 300 products contracted by more than 50 pharmaceutical companies
- **Overseas: South Korea Plant, USA Plant**

◎**Synergies with DNP**
- **DNP owns the API process, which is the front-end of drug formulation**
  : DNP Fine Chemicals Utsunomiya Co., Ltd.
- **The development and manufacture of packaging materials essential for drug formulation is a focus business area of DNP**
- **DNP's production technology can be applied to the testing process for formulations, etc.**



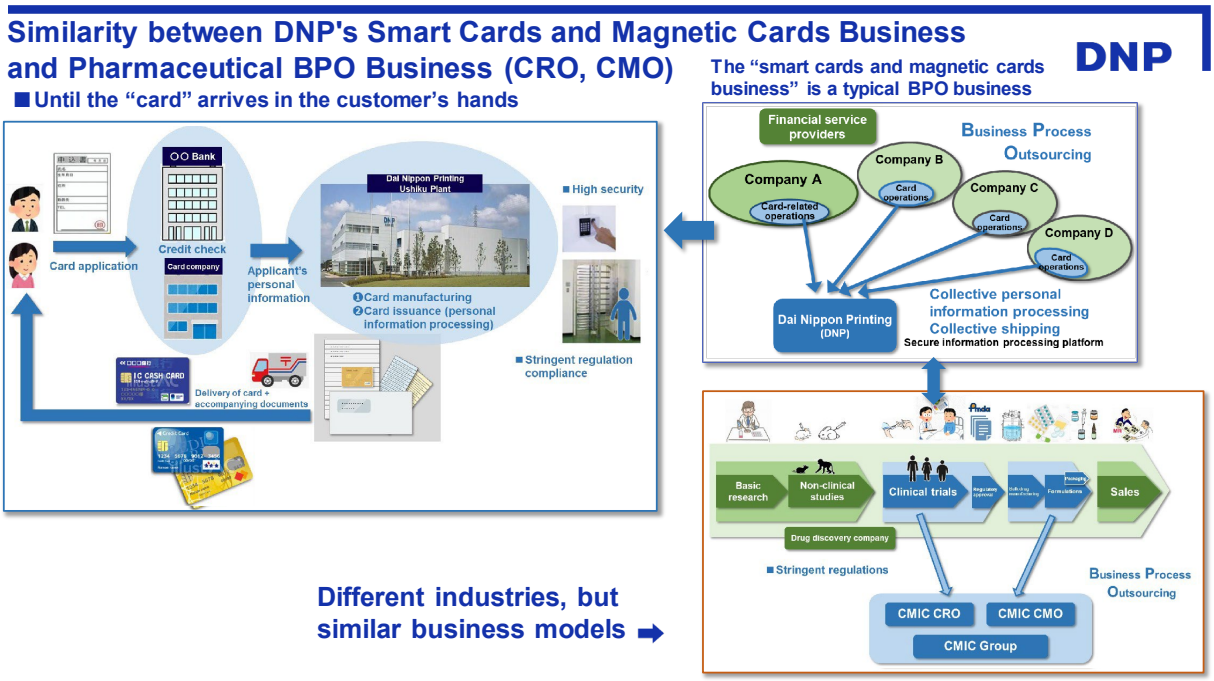
The business of "BPO (Business Process Outsourcing)" is not an uncommon form of business for DNP, which provides business processes for many pharmaceutical companies.

➡ **BPO business is one of DNP's distinctive business forms, as shown in "smart cards and magnetic cards business" on the next page.**

8

Now, CMIC CMO, which became a consolidated subsidiary of DNP in April last year, is the third largest CMO provider in Japan, with six plants in Japan and overseas, and four domestic plants are contracted by more than 50 pharmaceutical companies to manufacture more than 300 varieties of pharmaceutical products.

As I explained earlier, we own the current API manufacturing process, which is the front-end process for drug formulation, and the development and manufacture of packaging materials, or packages, which are indispensable for drug formulation, is DNP's focus area. We believe that our strength lies in our ability to provide a complete range of processes from API to formulation and packaging.



9

BPO (Business Process Outsourcing), a business form of outsourcing the business processes of many pharmaceutical companies on their behalf, is actually not uncommon for DNP, and the "IC card business" shown in the figure is one of DNP's representative BPO businesses.

DNP manufactures a large number of IC cards such as credit cards and cash cards. After you apply for a card, your personal information is actually transferred to DNP's factory after the screening process at the financial institution.

Therefore, under a strict security control system, encrypted personal data is written into IC cards and shipped to you from the DNP factory together with the accompanying documents, which are processed according to your individual needs.

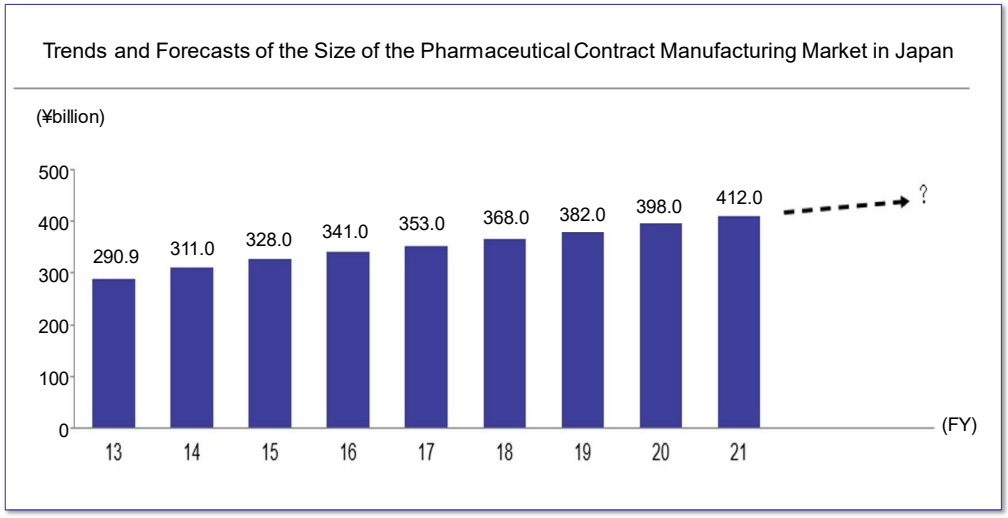
This type of business in which card-related operations for financial institutions are processed together on DNP's platform is a typical example of DNP's BPO business.

The CRO and CMO business model of the CMIC Group, which is entrusted with the entire process of clinical trials and drug formulation by pharmaceutical companies, is a very similar business model to DNP's IC card business, even though the markets are different. This is also the reason for DNP's strategic business alliance with CMIC Group.

Trends in the Size of the CMO Market in Japan

DNP

The Japanese CMO market has been growing at a rate of about 3-5% per year until now



Source: Yano Research Institute Ltd., "Pharmaceutical Contract Manufacturing Market 2023"

10

This graph shows that the domestic CMO market has grown at a rate of 3% to 5% per year from 2013 to 2021. Outsourcing of clinical trial operations and formulation processes from so-called "drug discovery companies" involved in new drug development is expected to further accelerate in the future.

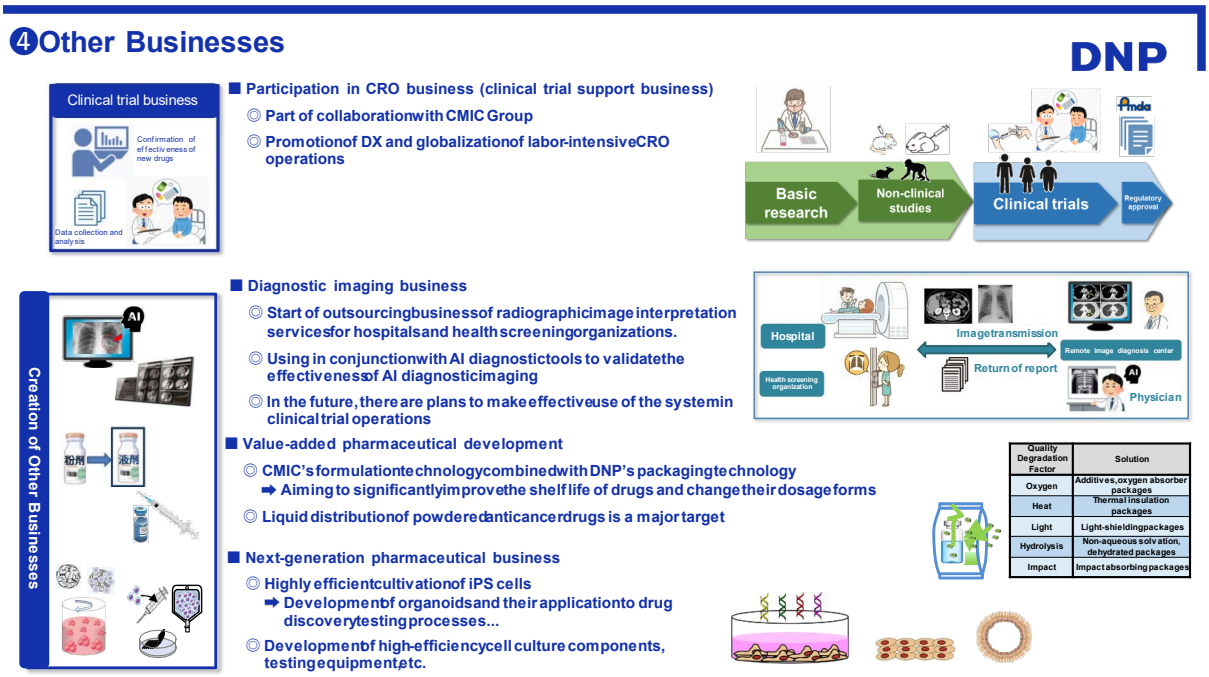
❸Formulation Business
CMIC CMO's Formulation Plants

DNP

11

This page shows an overall view of CMIC CMO's four domestic plants and two overseas plants.

The four plants in Japan were all acquired from major pharmaceutical companies, and we will continue to be contracted by many pharmaceutical companies to manufacture their pharmaceutical products as a BPO business company that is contracted by pharmaceutical companies for the manufacturing of their product.



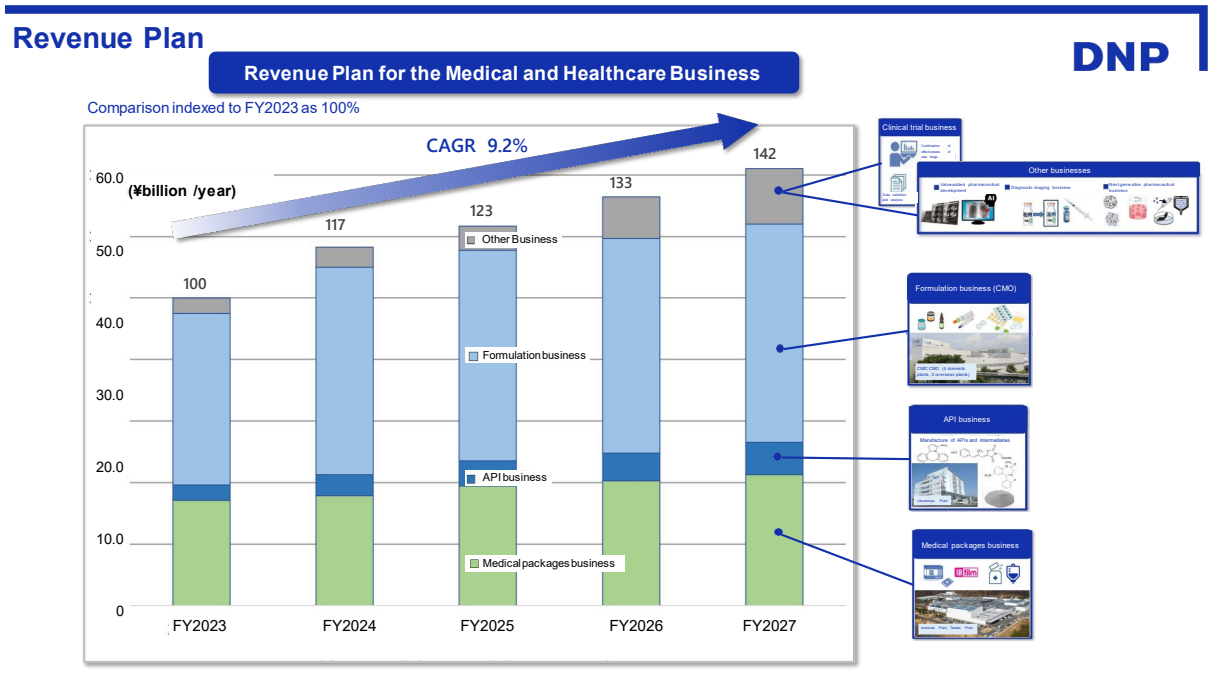
In this section, we will explain our other businesses in the medical & healthcare field.

The core business of the CMIC Group is the CRO business, which is contracted by pharmaceutical companies to conduct clinical trials. In this area, DNP will collaborate with CMIC to promote IT and DX in labor-intensive operations, and will also aim to respond globally.

In the diagnostic imaging business, we have started a business in which hospitals and medical checkup facilities outsource the diagnosis of medical images to us, professionally known as image reading, and we are also trying to put AI technology to practical use. We also believe that these diagnostic imaging technologies can be used in the future in the field of clinical trials.

For value-added drug development, we are trying to significantly improve the shelf life of drugs by combining CMIC's formulation technology with our packaging technology.

In the fields of regenerative medicine and cellular medicine, in which we have been involved for many years, we aim to develop technologies for culturing cells that can be used for various tests in the drug discovery process, as well as materials and components essential for cell culture.



This graph shows the sales plan for DNP's medical healthcare business.

We aim to achieve stable growth in the medical package business, active pharmaceutical ingredients business, and formulation business, aiming for sales in 2027 that are more than 1.4 times the actual sales in FY2023. The average annual growth rate is expected to be 9.2%.

Last but not least, DNP will continue to contribute more than ever to our clients, including pharmaceutical companies, and continuously support people's healthy, safe, and secure lives.

Wakabayashi: Next, Asaba, Senior Corporate Officer, will give an explanation of “content & XR communication", another new business field. Senior Corporate Officer, Asaba, please.

Asaba: Now let me introduce a new business theme in the smart communication area, "content & XR communication.” I’m Asaba. Thank you.

First, please take a look at the video that summarizes why we are engaged in this business, our strengths in this business, and our thoughts.

DNP was founded in 1876 as Shueisha and will celebrate its 150th anniversary in 2026. The Company's bylaws at that time stated "to engage in business that contributes to civilization.” The Company's founding desire to contribute to the advancement of people's knowledge and culture through letterpress printing continues to this day.

Our strength lies in the "conversion, processing, and management" of information in response to ever-evolving hardware, software, and other environments, utilizing the printing and information technologies we have cultivated over the years.

Recently, we have produced a variety of expressions that capture the entire space, such as showrooms, stores, museums, and special exhibitions, providing new experience value to society and connecting people with

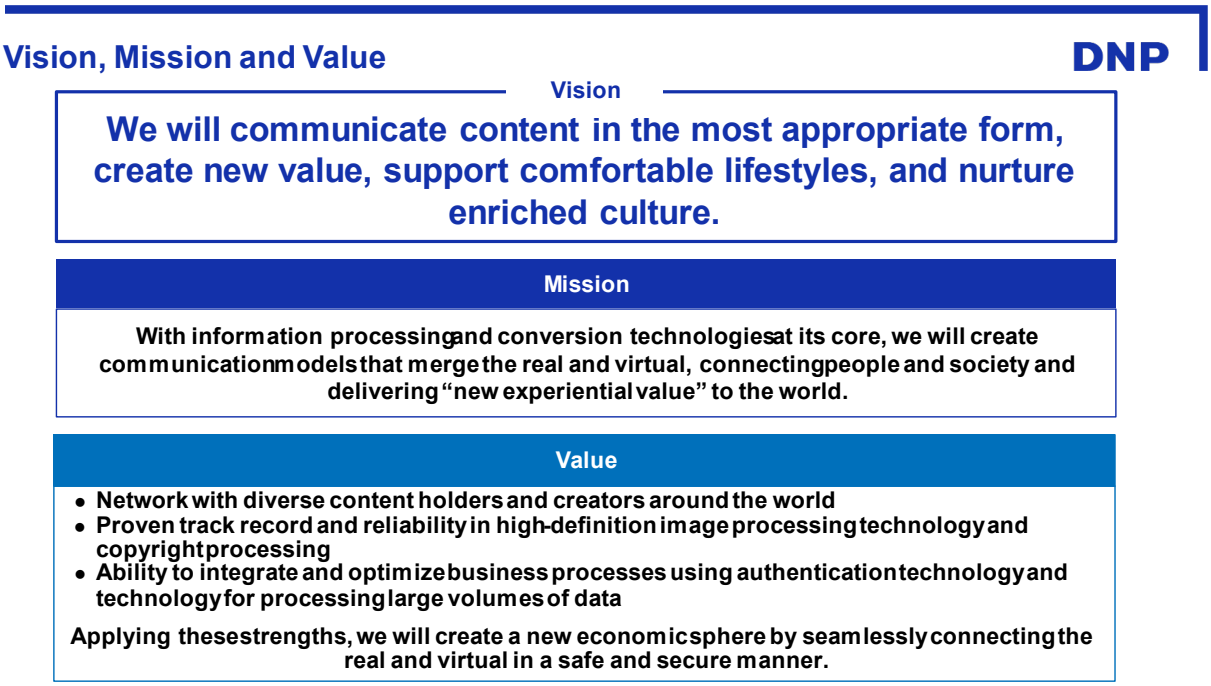
society. We also hope to offer XR communication as a new form of communication in the coming society where real and virtual life will be seamlessly connected.

Our goal is to foster culture now and in the future, and to create a comfortable and enjoyable lifestyle. We will initiate "content XR communication" to realize the "future normal".

The new business we just introduced, "content & XR communication," was born from the passionate desire of our employees. Since its establishment, DNP has been entrusted with content from a wide range of customers and has provided it to society in the most appropriate form. In the midst of all this, our employees felt a desire to deliver the appeal of Japanese content to the world with their own hands.

This desire led us to a concrete project, and in 2017 we began joint operation of the Tokyo Anime Center with the Japan Animation Association. "Tokyo Anime Center in DNP Plaza," which began at DNP Plaza in Ichigaya, Shinjuku-ku, moved to Shibuya, known as a new cultural town, in April 2021. Then, in April 2024, we expanded to San Francisco, North America, to bring the appeal of Japanese content to overseas fans.

In addition to these real-space communications, from 2021 we will expand our communication venues to virtual spaces, and have begun developing a metaverse that includes Miyashita Park in Shibuya and the Akihabara.



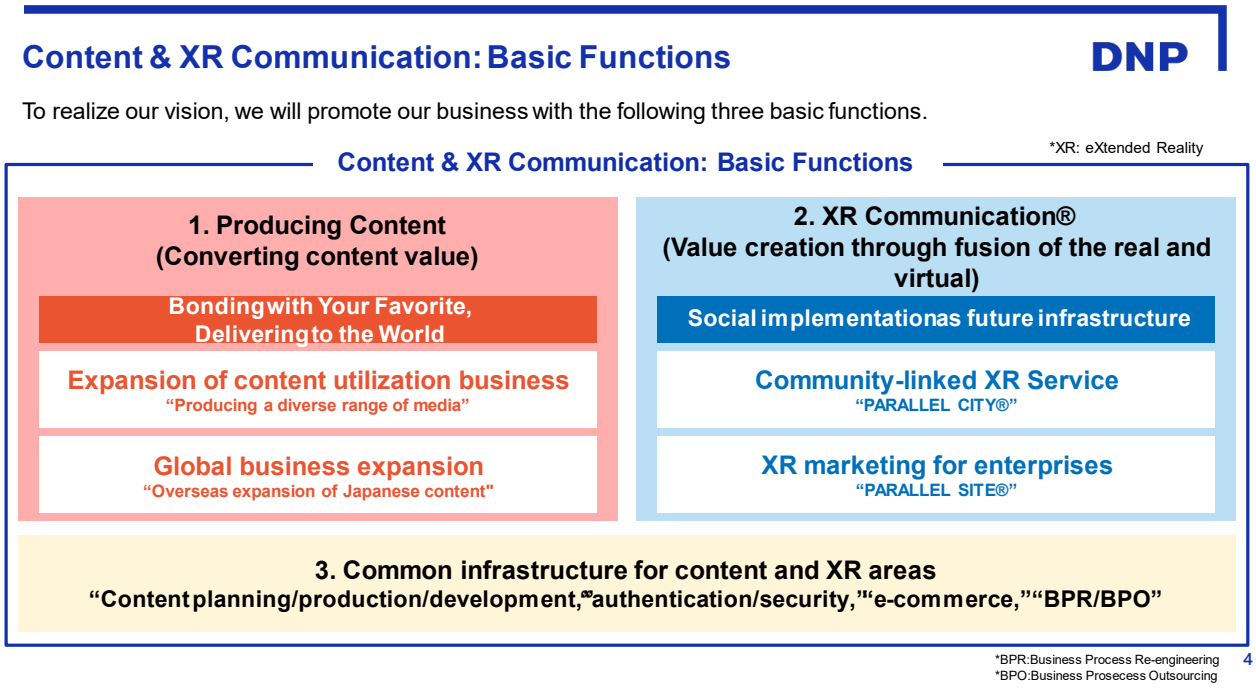
In promoting our "content and XR communication" business, we have developed a vision, mission, and values.

Our vision is set to "communicate content in the most appropriate form, create new value, support comfortable lifestyles, and nurture enriched culture."

Our mission is "with information processing and conversion technologies at its core, we will create communication models that merge the real and virtual, connecting people and society and delivering".

There are three values that make this vision and mission a reality: network with diverse content holders and creators around the world; proven track record and reliability in high-definition image processing technology and copyright processing; the ability to integrate and optimize business processes using authentication technology and technology for processing large volumes of data.

We will apply these strengths to create a new economic sphere by seamlessly connecting the real and virtual worlds in a safe and secure manner.



In order to realize our vision and mission, we have three basic functions to promote our business.

The first function is to promote content production. We optimally transform Japanese content to further enhance its value and provide it domestically and internationally. We aim "bonding with your favorites, delivering to the world." We will expand our content utilization business through producing diverse range of media, and at the same time, develop it globally.

The second function is XR communication, which provides new value to society by integrating communication in both real and virtual spaces. We provide XR services to local communities to help them revitalize their communities and solve their problems, and we provide XR services to companies to provide marketing support and other services. We aim to implement XR communication in society as the future infrastructure for communities and businesses.

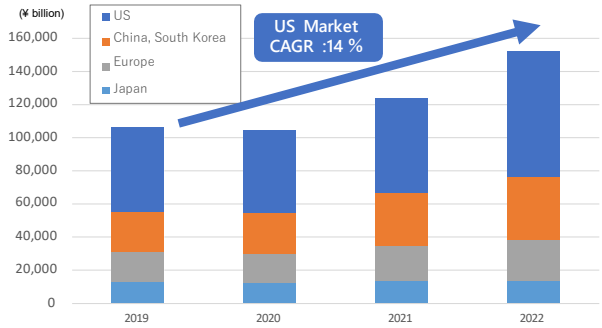
The third function is the common infrastructure that supports these functions in an integrated manner. The common infrastructure includes the technologies and organizations that DNP has cultivated in its traditional businesses to plan, produce, develop, and operate content. The Company is equipped with authentication security technology platforms and know-how developed and owned by DNP, business process reengineering and business process outsourcing for EC services and various business support services.

1-1. Content Market Growth and the Structure

DNP

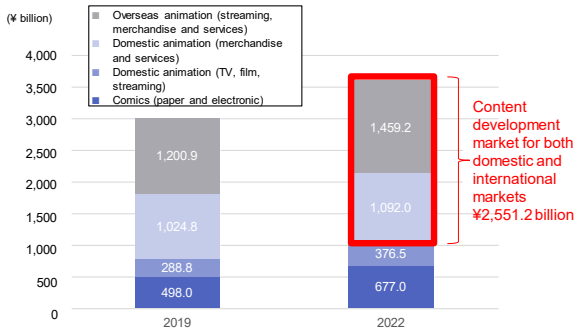
The size of the overseas content market has doubled in the last decade, with anime and console games showing remarkable expansion. North America is the largest market, growing at a CAGR of 14% since 2019. Secondary content development (merchandise, services, etc.) based on IP created in Japan is expanding, accounting for a large percentage of the domestic and international market.

Trends in the Size of the Overseas Content Market



Source: HumanMedia, "Japan and World Media Content Market Database"

Structure of Content Originating in Japan



DNP research

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Let us now introduce our business strategies and initiatives for each function.

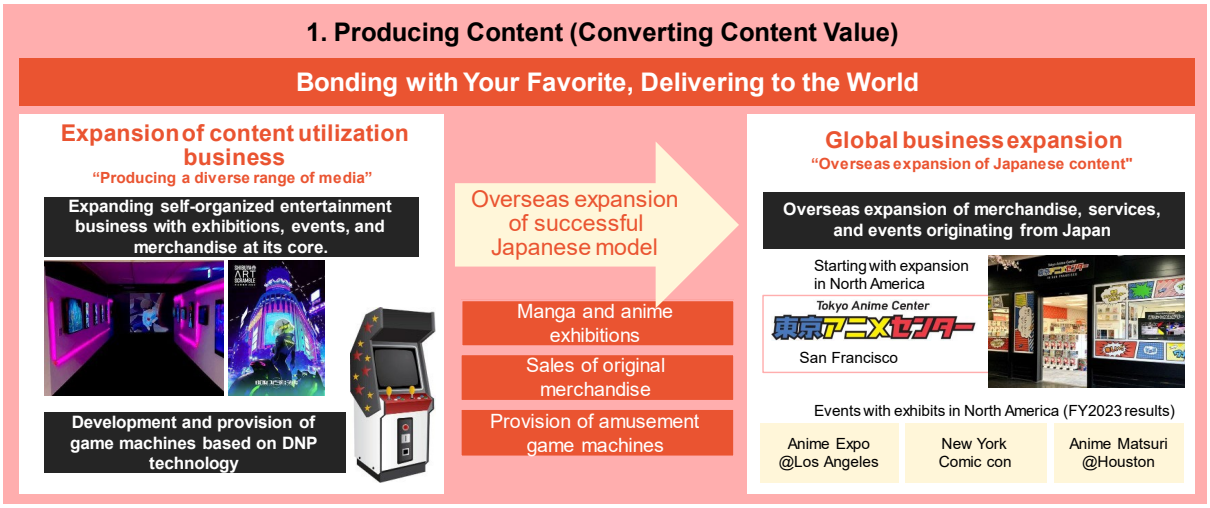
The market overview of the content industry will be briefly touched upon. The size of the overseas content market has doubled in the last 10 years, with animation and home video games showing remarkable expansion. North America in particular is the largest market, growing at CAGR of 14% from 2019.

This market traction has been influenced not only by the development of video distribution services, but also by the growing demand for merchandising and secondary development such as exhibitions. The changing social environment and consumer needs have led to a worldwide demand for a style of enjoying content in a variety of media, and we will continue to focus on this market and develop our business.

1-2. Producing Content

DNP

We will expand the range of our business by applying DNP's strengths in information processing and conversion technologies and software and hardware development capabilities to the development of diverse media in response to changes in the environment and consumer needs. We will also focus on countries and regions with large demand and expand the successful Japanese model globally.



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Business strategy for producing content and its efforts in this area are presented here.

As the market environment I discussed earlier, diverse media development is essential in today's content business. We will expand our business domain by applying our strengths in information processing and conversion technology, software, hardware, and development capabilities.

We have already launched an entertainment business with special exhibitions, events, and products at its core, as well as the development of gaming equipment based on DNP's technology. We will also develop these successful Japanese models by focusing on countries and regions with large demand.

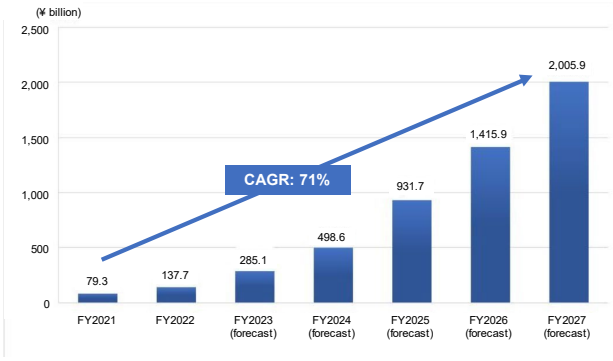
In April 2024, we opened the "Tokyo Anime Center" in San Francisco. DNP also offers its unique experiential value to large-scale overseas exhibitions where fans of Japanese content gather, such as "Anime Expo."

2-1. XR Communication Market Growth

DNP

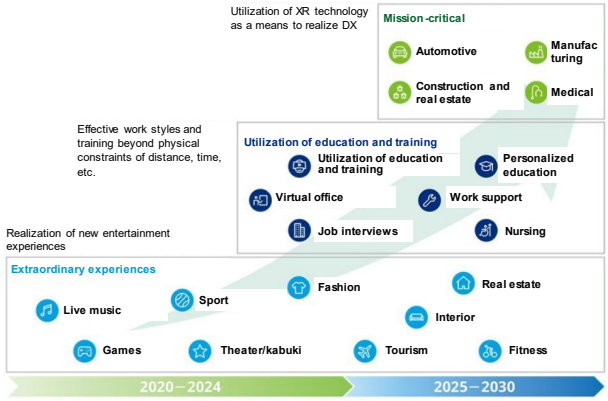
The domestic market for XR and metaverse is expected to grow at a CAGR of 71% until 2027, reaching a value of ¥2 trillion. It is expected to be used in a widening range of areas, from “extraordinary experiences” such as entertainment to “educational and training applications” and “mission-critical” applications.

Domestic Market for XR and Metaverse



Source: Yano Research Institute Ltd., “The Metaverse Market 2023”

Scenarios for Expansion of Areas Utilizing XR and Metaverse



Source: Prepared by Deloitte Tohmatsu Consulting

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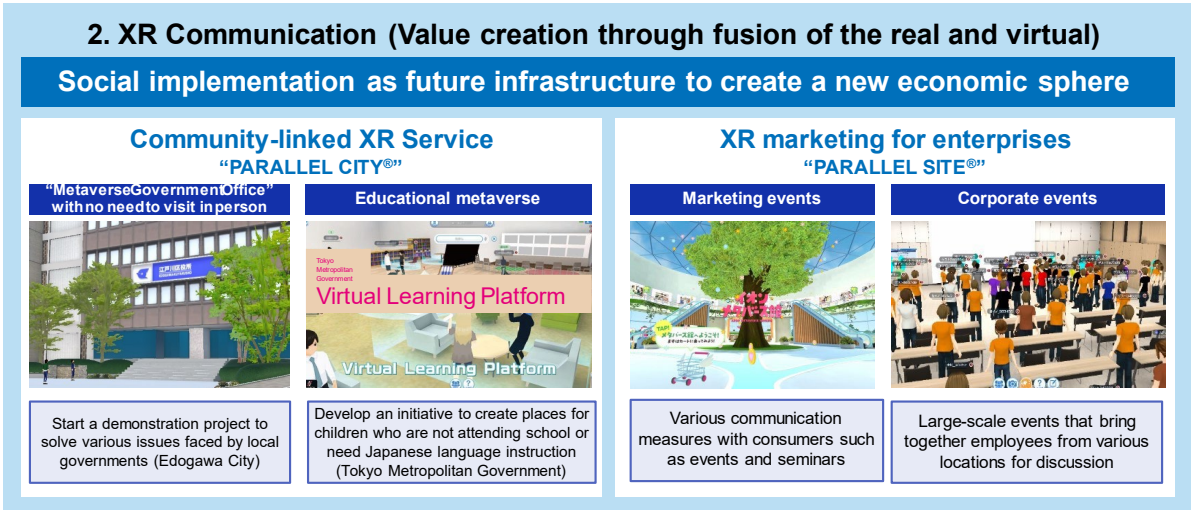
The XR communication market is still in its infancy. However, the domestic market is expected to grow 71% per year through 2027, reaching a value of JPY2 trillion. In particular, XR utilization to date has been dominated by entertainment applications. In the future, it is expected to be used in the education field, where manpower shortages are urgently needed to be solved, and in areas such as training, to realize effective ways of working that transcend physical limitations.

Subsequently, it is expected that the use of XR and Metaverse will be widely spread as DX in various industries and business categories.

2-2. Promotion of XR Communication

DNP

By combining DNP's authenticationsecurity, BPO, and DX solutions to provide a total service, we aim to solve community issues and create new experiential value for corporate marketing and social implementation.



XR communication provides solutions to local issues and new experiential value for corporate marketing through comfortable, safe, and secure communication that connects people and society.

The community-linked XR service aims to realize a digital society where no one is left behind by reaching out to those who have difficulty benefiting from existing systems and services due to various physical, temporal, and psychological barriers.

The "Metaverse Government Office," which is being promoted as a municipal DX, has begun a demonstration project with local governments, aiming to reduce the workload of employees by combining BPR (Business Process Reengineering) and BPO (Business Process Outsourcing) in addition to improving services for residents. In addition, we have provided Metaverse Space to 30 municipalities in Tokyo as a place for children who have difficulties to attend school or need Japanese language instruction, and are in the process of expanding the program to other municipalities.

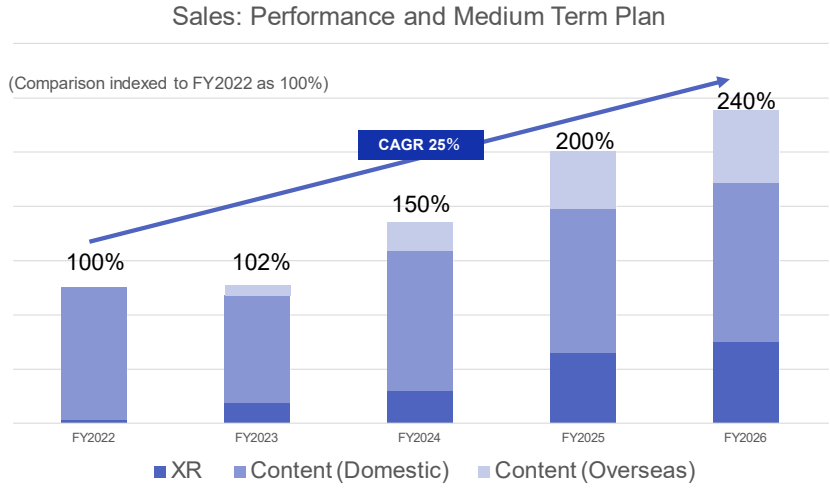
Through these activities, we aim to create a community platform where anyone can access government services at any time and from anywhere.

In the area of corporate marketing, the use of this service is expanding for corporate anniversary events and as a communication measure with stakeholders. In addition, companies with multiple locations in Japan and overseas are beginning to adopt the system as a measure for inner branding and improving employee engagement. Of course, DNP also holds in-house events for employees from all over the country.

Business Targets

DNP

In the business for the content and XR communication area, DNP aims to expand sales to 240% of the FY2022 level by FY2026.
We will actively invest in content, and invest in and collaborate with co-creation companies in order to expand our business.



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Lastly, I would like to explain business target.

In this business, we aim to expand sales by 240% in FY2026 compared to FY2022. To expand this business, we will actively invest in content, and invest in and collaborate with co-creation companies.

In May of this year, we invested in monoAI technology K.K. to strengthen the foundation of XR communication. Together with our alliance partners, we will continue to strengthen our business promotion system.

We aim to create new experience value and economic spheres by seamlessly connecting the real and virtual worlds and optimally transforming content. Content XR communication is committed to supporting comfortable living and fostering a spiritually rich culture. We look forward to seeing you in the XR space.

Wakabayashi: We will now take a break. We will begin the question-and-answer session at 2:40 PM. Please wait for a while until the session is resumed.

[END]

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