

## BUSINESS PROMOTION



### Information Communication

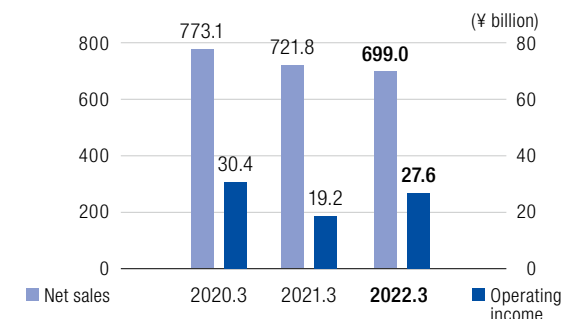
### Financial Highlights and Business Strategies



#### FY2021 Financial Highlights

**Although sales decreased, operating income increased thanks to a recovery in Imaging Communication and the effect of cost structure reforms.**

Net Sales	FY2021		
	2020.3	2021.3	2022.3
	773.1	721.8	699.0
Operating Income	FY2021		
	2020.3	2021.3	2022.3
	30.4	19.2	27.6
	3.9 %	2.7 %	4.0 %



#### [Net Sales]

Although sales of e-books and library-related services remained strong and the Imaging Communication Business recovered steadily after a sharp decline the previous year, overall sales decreased year on year by 3.2%, or 22,816 million yen, due in part to declines in BPO as well as in the area of printed media, including publication printing and commercial printing.

#### [Operating Income]

Operating income increased 43.9%, or 8,431 million yen compared to the previous fiscal year due to a significant recovery in the Imaging Communication Business, cost reductions and progress in business structural reforms. The operating income ratio rose 1.3 percentage points to 4.0%, from 2.7% the previous fiscal year.

#### FY2021: Impact on business units due to changes in business environment

	COVID pandemic	Exchange rate fluctuations	Surges in prices of raw materials	Semiconductor shortages
Information Innovation Business	↑ Although the impact continued, there was a gradual resumption of economic activity and a recovery in demand due to the spread of vaccines and other factors			
Imaging Communication Business		↑ Depreciation of the yen increases the yen-equivalent value of foreign currency denominated sales and profits, and boosts export competitiveness	↑ Higher prices for printing paper, IC chips and other products	↓ Sales growth slowed by difficulties in procuring IC chips, photo printers and other equipment
Publishing Business				

#### TOP MESSAGE

#### 1 THE DNP GROUP'S VALUE CREATION STORY

#### 2 PROGRESS WITH MEDIUM-TERM MANAGEMENT PLAN

#### 3 BUSINESS PROMOTION

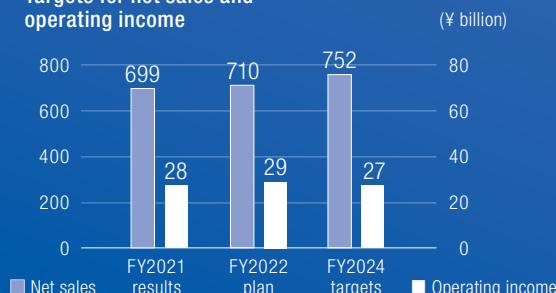
#### 4 REINFORCING BUSINESS BASE

#### 5 MANAGEMENT STRUCTURE

#### 6 BUSINESS RESULTS/ CORPORATE PROFILE

#### Medium-term Management Plan

##### Targets for net sales and operating income



##### Basic policies

- DX for CX: Promote digital transformation aimed at adding value to the customer experience (CX)
- Downsize paper media production bases etc.

##### Strengths

- Maintaining a publishing value chain from information processing to printing, and manufacturing to distribution and sales
- Advanced security environment and management system
- Expansion of hybrid business combining real and digital etc.

##### Risks and opportunities

- Developing new ways to work and live, rapid changes in economic activities
- Outflow or infringement of intellectual property, personal information leaks, increase in cyber attacks
- Increasing burden of human resource retention due to rapid changes in the employment situation
- Difficulties in procuring materials due to soaring prices of raw materials and supply chain disruptions etc.

#### Business Strategies and Main Initiatives toward Achieving Medium-term Goals

##### ① Create value primarily in growth areas

- Supporting people's knowledge and contributing to the development of publishing culture

We will enhance the business of our "honto" hybrid bookstore network that links an e-commerce website where customers can buy e-books and paper books with the brick-and-mortar stores operated by Maruzen Junkudo Bookstores Co., Ltd. In addition, we will support consumers' knowledge through a variety of channels, including the consigned operation of libraries and the provision of electronic library services.

- Expand the scale of business by promoting hybrid marketing

Utilizing consumer information from both real and digital sales channels, we will provide the most appropriate information to each individual using the most appropriate channels and timing. We will also participate in the overall marketing of client companies, from planning to production and operation, to design optimal communication measures between companies and consumers to maximize the value of the customer experience.

- Efficiently solving and improving company's business issues with BPO

We use advanced security environments, expertise in business design and information management and the latest technologies including AI and RPA\* to efficiently solve the myriad of business issues that companies face, from labor shortages and work style reforms to business continuity plans (BCP) in anticipation of emergencies. We also provide new value through consultation for optimizing business design and making operational improvements.

\* Robotic Process Automation (RPA): Business automation using robots (software) that utilize AI

- Provide unique value and build presence in the authentication and security business

For a range of industries, we will provide a robust security environment that combines information-related and physical aspects, focusing on services that use digital keys to authenticate objects and facial recognition for personal authentication. We will build our presence in the authentication and security market by leveraging our core technologies and

service development strengths, together with our substantial experience in collaborating and consulting with partners.

- Promoting digital transformation and accelerating the rollout of new photo services

Utilizing the approximately 7,400 (as of April 2022) networked "Ki-Re-i" ID photo printing machines installed across Japan, we will support electronic application procedures for official certificates and various qualification certification. In addition, we will expand the use of the "Ki-Re-i" system to provide services, such as by collecting on the network photos to create employee ID cards. We will also provide consumers in Japan and abroad with a range of services that enhance the experience value of photography at theme parks and events.

##### ② Provide value optimized to each country and region

In the field of smart cards, we will work with our business/capital alliance partners among major card manufacturers in Vietnam and Indonesia to strengthen our business for ID cards and financial institutions cards, primarily in the Southeast Asia region. In the area of photo printing, we will continue to focus on capturing crossover demand from other printing methods to our dye-sublimation thermal transfer printing media for photo prints, mainly in emerging markets, and will continue to promote production in optimal locations on a global scale.

##### ③ Enhance corporate value through all manner of structural reforms

By using marketing that utilizes bookstore data, leveraging our publishing value chain and improving logistics through collaboration with partners, we will promote manufacturing and distribution reforms to provide books in a timely manner. In publication printing and commercial printing, we will optimize our production system to meet the needs of the shrinking paper media market. In BPO-related services, in which various operations are outsourced, we will strive to improve productivity and quality by utilizing AI, robotic process automation and digital workflows, and by effectively utilizing our domestic and overseas bases we will provide services through an optimal system that is not limited by personnel or location.



## Driving digital transformation (DX) and providing customer experience value (CX) that is essential to new ways of working and living

DNP has been entrusted with important corporate and personal information for many years and has been involved in the digitization of the printing process since the 1970s as part of our diverse range of business activities. We are also independently developing technologies for information security, image processing and recognition, media conversion

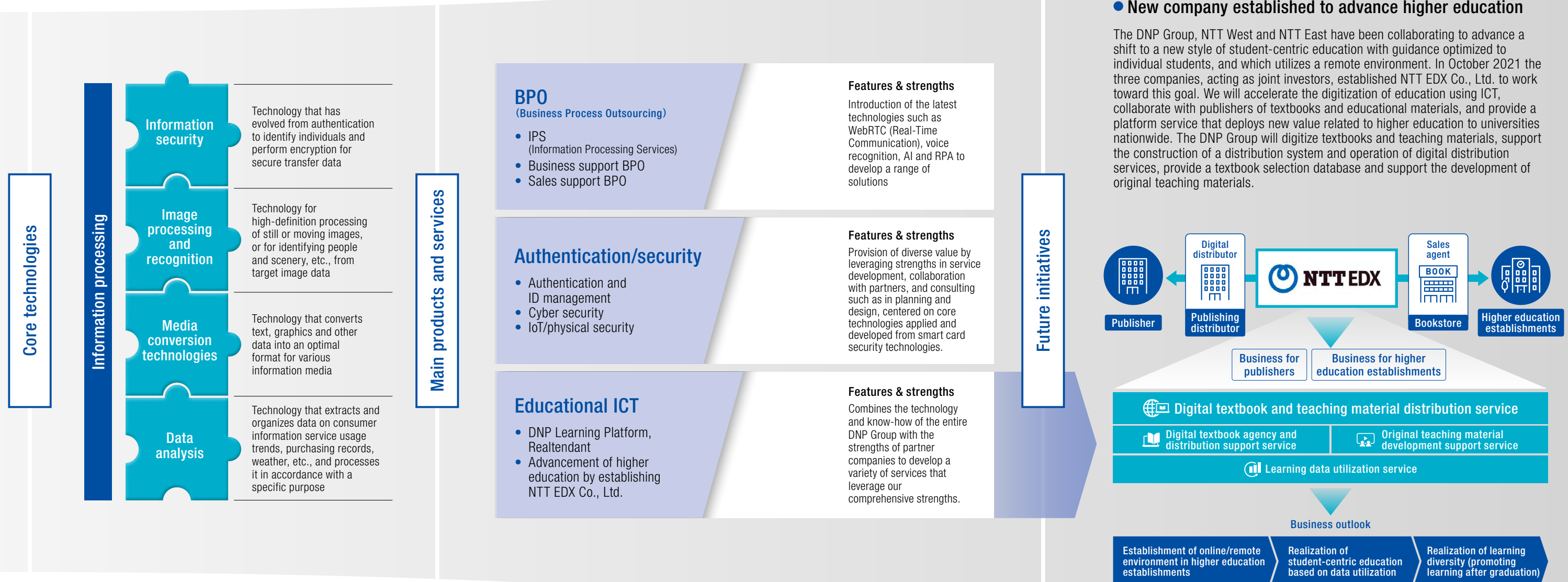
and data analysis. In recent years, as the nature of communication has changed and new workstyles and lifestyles have emerged, we have been promoting DX in ways that only DNP can offer, by combining technologies we have cultivated in the printing process with our expertise in sales, planning and manufacturing, and with the strengths of its partners.

For example, in the business process outsourcing (BPO) business, in addition to 24-hour/365-day support at domestic and overseas locations, we are helping companies and organizations to solve their business issues with speed and efficiency by deploying the latest technologies including AI and RPA to tackle growing social issues from labor shortages and work style reforms to business continuity plans (BCP) in anticipation of emergencies.

We also build and operate a variety of advanced security-related technologies and system infrastructures, leveraging the strength of our smart card business, which has the largest market share in Japan. We also provide physical security for offices and factories, such as security

gates and surveillance cameras, and train personnel to be able to respond to cyber attacks. In addition, we are expanding our authentication and security business such as by authenticating objects with digital key systems and using facial recognition for personal authentication.

In the field of education, we provide a distribution system for digital textbooks and other materials, and produce educational materials using video, audio and other media. In addition, we provide a network service developed to ease the process of textbook and teaching material selection by connecting many publishers, universities, textbook sales companies and bookstores.

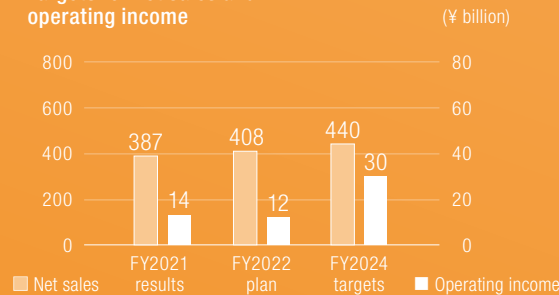






## Medium-term Management Plan

## Targets for net sales and operating income



## Basic policies

- Leverage converting technology to strengthen new product development and sales
- Push ahead with review of low value-added products etc.

## Strengths

- Maintaining unique converting technologies such as coating and laminating
- Development technologies for high value-added products including eco-friendly products and barrier films
- Leading global share in battery pouches for lithium-ion batteries etc.

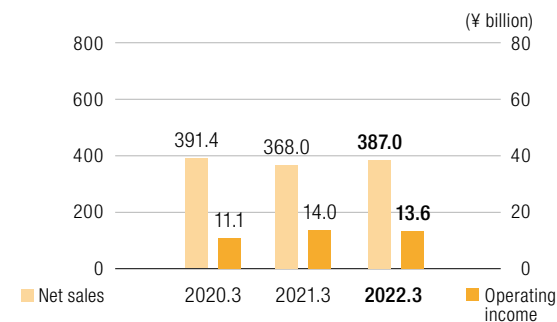
## Risks and opportunities

- Shift to a decarbonized society, response to climate change, conservation of biodiversity
- Tackling food loss, ensuring that food is safe and secure
- Dealing with various infectious diseases through anti-bacterial and anti-viral products etc.
- Changes in the business environment, such as soaring prices of raw materials etc.

## FY2021 Financial Highlights

Although sales rose as focus businesses expanded, income decreased slightly due to higher materials costs.

Net Sales	2020.3 2021.3 2022.3		
<b>+5.2%</b>	391.4	368.0	387.0
Operating Income	11.1 14.0 13.6		
<b>-2.4%</b>	11.1	14.0	13.6
Operating income margin	2.8 % 3.8 % 3.5 %		
	2.8 %	3.8 %	3.5 %



## [Net Sales]

Sales of battery pouches for lithium-ion batteries for electric vehicles increased due to expanding global demand, and there was also a recovery in demand in the housing and automobile markets, boosting sales of various interior and exterior materials. Overall, sales increased by 19,023 million yen, or 5.2%, compared to the previous fiscal year.

## [Operating Income]

Operating income decreased by 2.4%, or 340 million yen, compared to the previous fiscal year, largely due to a sharp rise in raw material prices. Operating income margin declined 0.3 point from 3.8% the previous fiscal year, to 3.5%.

## FY2021: Impact on business units due to changes in business environment

	COVID pandemic	Surges in prices of raw materials	Semiconductor shortages
Packaging Business	Continued restrictions on peoples movements in Japan and abroad		
Living Spaces Business	Gradual resumption of economic activity and recovery in demand	Increased procurement costs for petrochemicals and aluminum	
Industrial High-performance Materials Business	Auto supply chains impacted by disruptions in international distribution networks		Sales growth slowed due to reduced automobile production

## Business Strategies and Main Initiatives toward Achieving Medium-term Goals

## ① Create value primarily in growth areas

- Striving to realize a decarbonized society, recycling-oriented society and society in harmony with nature through All DNP

By enhancing products and services and promoting the development of mechanisms for eco-friendly packaging, including plant-based packaging materials and mono-material packaging materials, we provide three forms of value, namely resource circulation, CO<sub>2</sub> reduction and preservation of the natural environment. In addition, as demand for clean energy grows, we will develop and provide products and services that reduce our environmental burden, such as back sheets and encapsulants for solar cells with excellent power generation efficiency and long life.

## ● Providing high value-added products

Seeing not only homes and commercial facilities but also vehicles and rail cars as living spaces that require comfort and function, we will strive to expand our market share of high value-added products utilizing DNP's proprietary electron beam (EB) coating technology. We will also further expand our lineup of high-function, high value-added products, such as anti-bacterial and anti-viral products for interior applications and products for exteriors, for which demand is expected to grow.

## ● Developing products and services for a next-generation mobility society

We will continue to provide high value-added products and services to realize a next-generation mobility society. We will further concentrate on expanding the business of battery pouches for lithium-ion batteries, which are in growing demand for use in electric vehicles. We will also provide high value-added products and services such as films and formed products for interior and exterior use that feature excellent design and functionality, new products such as curved resin glazing that helps reduce the weight of vehicle bodies, sheet-type coils for wireless power supply that can charge without contact and Mobility as a Service (MaaS).

## ② Provide value optimized to each country and region

With the aim of expanding our market share in Southeast Asia, our Packaging Business will expand sales in Indonesia and Vietnam, where our production bases are located, as well as to neighboring countries such as Thailand and Myanmar. This is part of our efforts to expand our share to global companies.

Our Living Spaces Business is utilizing our global sales network to expand our market share in Europe, the United States and emerging countries for metal panels and interior and exterior materials for automobiles with excellent design.

Our Industrial High-performance Materials Business will construct a new slit processing line for lithium-ion battery pouches at the Denmark Plant that is scheduled to start operation in the latter half of fiscal 2022, as we accelerate our expanding share in the global market for battery pouches for lithium-ion batteries, photovoltaic module components and industrial barrier films.

## ③ Enhance corporate value through all manner of structural reforms

In the Packaging Business, we consolidated facilities in the Kansai region at the Tanabe Plant (Kyoto Prefecture) within fiscal 2021 as part of a review of low value-added products and site reorganization. In addition, in the Industrial High-performance Materials Business, we established a new production line for lithium-ion battery pouches at the Tsuruse Plant (Saitama Prefecture) in fiscal 2022. Looking ahead, we will continue to review our business portfolio and promote enhanced productivity, improved profitability and other advancements.

## Lifestyle & Industrial Supplies | Focus Business

### Providing the essential values of safety, security, health, comfort and environmental consciousness with functional films that utilize converting technology

DNP develops and provides a wide variety of functional film products, leveraging its strengths in converting technology, a unique material processing technology that includes coating, lamination, bag manufacturing and forming. For example, the function of barrier films to protect contents is required not only in conventional food packaging but is also being sought

in many other fields. To meet these needs and anticipate further expectations, we are working to improve film characteristics, such as gas barrier properties against water vapor and oxygen and shaping flexibility.

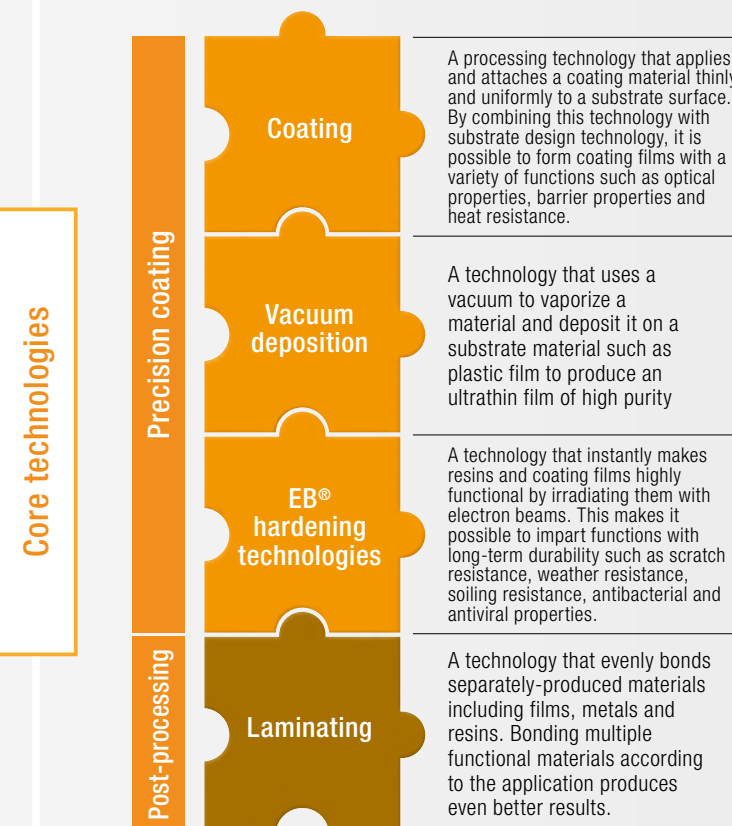
In the Packaging Business, DNP has expanded its Innovative Barrier (IB-FILM) series of deposition films, which combine gas

barrier properties with transparency. It is also working to expand its share of the market for environmentally conscious products such as with its series of plant-based packaging materials, which is a blend with plant-based materials.

In the Industrial High-performance Materials Business, demand for safe, secure pouches for lithium-ion batteries used in information terminals and vehicles is increasing. We will also expand the market for high-performance products such as the DNP Multifunctional Insulation Box, which can maintain a constant temperature for an extended period of time without a power source, and containers for the transfer and storage of vaccines and other medicinal solutions.

We will also be further advancing the use of DNP's

proprietary EB hardening technology, which instantly improves the performance of resins and films by electron beam radiation. In addition to providing functions such as weather resistance, soiling resistance and scratch resistance, this technology also imparts greater freedom of form such as in bending and folding. It also contributes to environmental burden reduction and health through energy-saving production processes, CO<sub>2</sub> reduction and the use of solvent-free coating, etc. In the Living Spaces Business, we will apply this technology to interior and exterior materials for residential and non-residential use and expand the use of mobility resin materials, providing further value in the areas of safety, security, health and the environment.



#### Main products and services

#### Eco-friendly packaging materials

- DNP plant-based packaging materials
- Transparent vapor deposition film "IB-Film"
- DNP mono-material packaging materials

#### Features & strengths

We develop functional materials that reduce the environmental burden, improve the protection and preservability of contents and support simple cooking using microwave ovens, providing users with greater usability.

#### Mobility-related products

- Lithium-ion battery components
  - Battery pouches (exterior film wrap)
  - Battery contact tab foil
- Decorative panels that feature excellent functionality and design
- Resin products that contribute to automotive weight reduction

#### Features & strengths

Future initiatives product lines that make use of technologies such as coating and lamination. We develop various products that make rechargeable batteries lighter, thinner, longer and safer, and resin molded products with enhanced surface resistance and functionality.

#### Industrial high-performance materials

- Encapsulants and back sheets for photovoltaic cells
- Medical and industrial components
- DNP Multifunctional Insulation Box

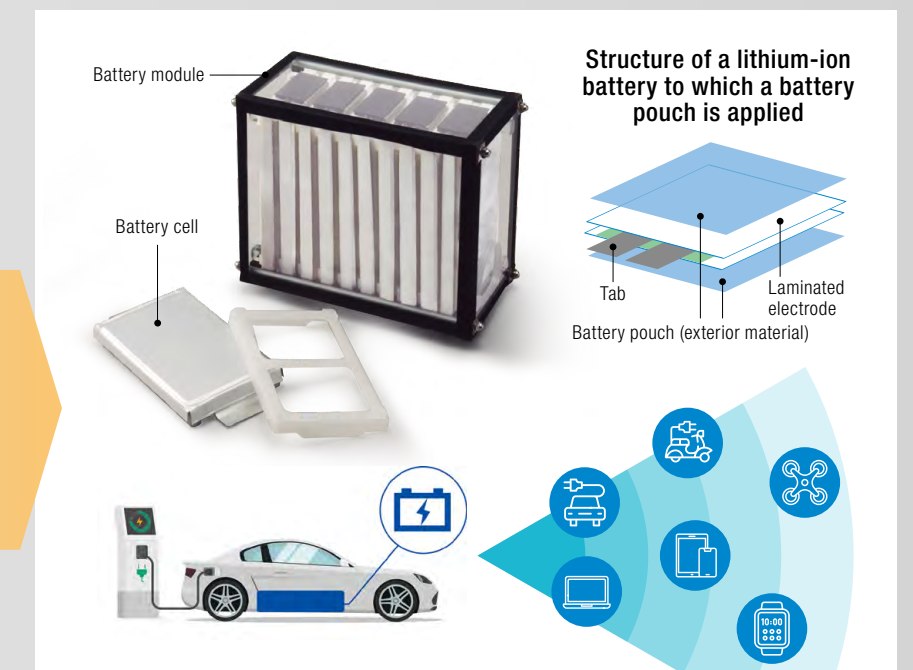
#### Features & strengths

With a proven record of stable quality as our strength, we provide new value in products such as solar cell materials for the expansion of renewable energy and products for medical, pharmaceutical, industrial applications.

#### Future initiatives

#### Expanding the lithium-ion battery pouch business

- DNP will maintain and strengthen its global market share leadership by leveraging its strengths in converting technology and other areas to establish de facto standards in the industry and further expand applications.



- Establishment of new production bases to enable further capacity expansion beyond fiscal 2023

For lithium-ion battery pouches overall  
**sales of ¥100 billion** in fiscal 2024





## Developing and providing key components that highly integrate real and digital, such as optical films utilizing clean converting technology

In a society where everything is connected to the Internet, DNP is leveraging its unique strengths to develop a variety of products and services that enhance the value of people's lives in the display-related and electronic device business domains which form the interfaces between the real and

virtual worlds. These developments are made possible by our clean converting technology, which combines optical technologies with precision thin-film coating and precision molding.

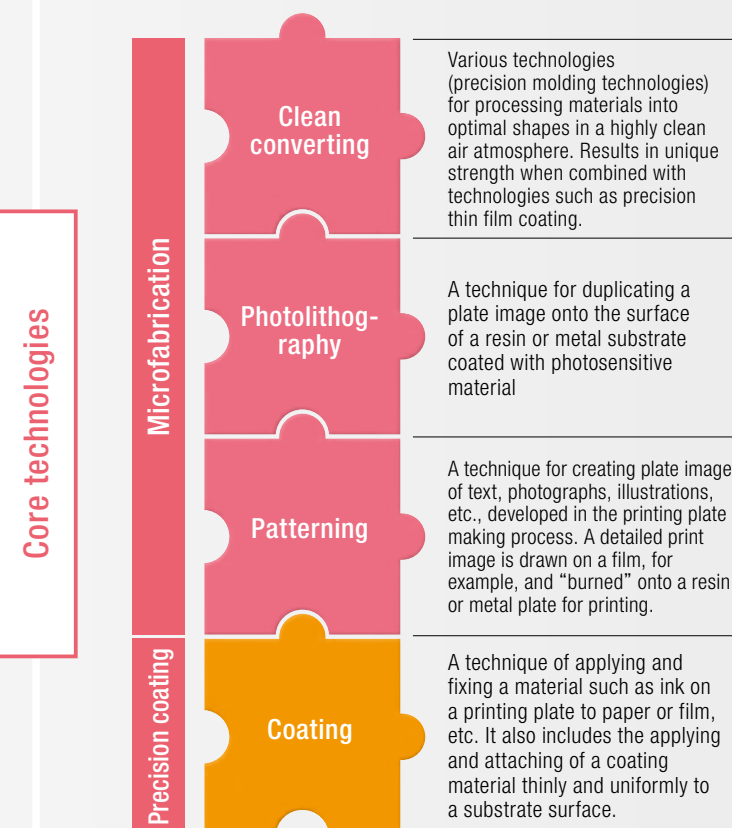
For example, we have developed a wide variety of optical

films that include anti-reflection films which make displays easier to see by reducing light reflection, and which continue to gain a high market share. We will continue to work on higher-definition, multi-functional and energy-saving displays, providing a wide range of products unique to DNP and our mastery of the characteristics of light.

We have the top share of the world market for the metal masks which are an indispensable component in the production of OLED displays, which are becoming increasingly popular in smartphones and other devices. We will continue to use our unique photolithography and etching technologies to develop OLED displays that are thinner,

lighter and higher-definition.

In addition, DNP has developed thinner vapor chambers, a heat-dissipating component that by preventing information devices from overheating, increases the degree of freedom in designing smartphones and other devices. We are also developing 5G-compatible products such as transparent antenna films that can be affixed to displays, walls, windows, ceilings, automotive glass, utility poles, etc. DNP will continue to develop and provide new value by further enhancing its unique P&I (Printing and Information) strengths and utilizing the synergies derived from combining those strengths.



### Main products and services

#### Optical films

- Anti-reflection film
- Retardation film
- Viewing angle control film

#### Features & strengths

We are the world's pioneer in the development of various components and materials for advancing displays, such as flexible LCDs, OLEDs and electronic paper.

#### OLED display manufacturing components

- Metal masks

#### Features & strengths

Developed metal masks for manufacturing high-precision OLED displays with the world's top market share. Our development of cutting-edge products is based on our strengths in technology accumulated over 65 years, starting with the development of shadow masks for cathode ray tubes at the dawn of the emergence of domestic color televisions.

#### 5G-related

- Photomasks for semiconductors
- Vapor chambers (metallic heat-dissipation component)
- Transparent antennas film

#### Features & strengths

With its strength in various microfabrication technologies, circuit formation and electronic component mounting technologies, the company provides components for 5G-related precision equipment and antennas for "5G communications that integrate into our daily lives."

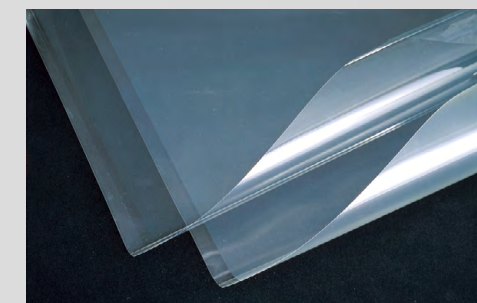
### Future initiatives

#### Expansion of optical film-related business

- Securing market share in China with the ultra-wide line at the Mihara plant in Hiroshima Prefecture



- Improving the competitiveness of products



- Expanding sales of optical film products for OLED displays, which require further added value