Oji Holdings

Corporation

Net sales ¥1,706.6 billion Operating profit ¥84.8 billion

Changes in Net 1,470.2 Sales and **Operating Profit** Net sales (¥ billion) Operating profit (¥ billion)

Industrial Materials COMPANY

Household and Consumer Products COMPANY



Containerboard/corrugated containers, Boxboard/folding cartons, Packaging materials/paper bags

Domestic

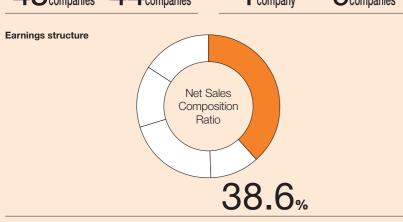
Domestic	Overseas
43 companies	44 companies

Household papers

Affiliated companies

Domestic	Overseas
_	

6 companies company



¥780.5billion

Functional Materials COMPANY

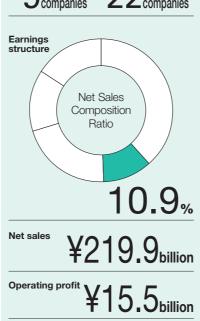


Main businesses

Specialty paper, Thermal paper, Adhesive products, Film

Affiliated companies Domestic

Overseas



Forest Resources and Environment Marketing COMPANY



Main businesses

Pulp, Energy, Plantation services, Lumber processing

illilateu companies	
Domestic	Overseas
17 companies	29 _{companie}
Sarnings tructure Net S Compo	osition

20.9% ¥423.8billion

¥68.5billion

Printing and Communications Media COMPANY

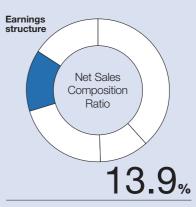


Main businesses

Newsprint, Printing and Publication paper, Communications paper

Affiliated companies

Domestic	Overseas
7 companies	1 company



¥281.0billion

 $Y(4.8)_{\text{billion}}$

Corporate Management Group and Shared Service Companies

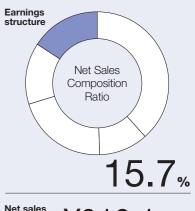


Main businesses

Real estate, Engineering, Trading business, Logistics, etc.

Affiliated companies

Domestic Overseas 2 companies 15 companies



¥318.1 billion

¥8.4billion

† Net sales and operating profit of Oji Holdings Corporation include adjustments (primarily those for internal transactions).

Household and Industrial Materials Businesses | Industrial Materials Business



Through offering innovative proposals using sustainable paper packaging materials to protect the environment while increasing profits, we will respond to the trust of our stakeholders.

> Oji Holdings Corporation **Executive Officer** President, Industrial Materials COMPANY

Akio Hasebe

Business Overview

The Industrial Materials Business has production and sales structures that integrate material and converting from base paper manufacturing to product processing and packaging design for the packaging materials that are essential to industry such as corrugated containers, folding cartons, and paper bags and responds in a timely manner to customer needs.

Corrugated Container Business

As well as corrugated containers used in foodstuffs, daily products, electronics, and other areas, we also offer heavy-duty packaging materials used for transporting mainly industrial parts. We also provide automatic packaging systems adjusting the packaging dimension in order to fit each product size inside.

Folding Carton Business

For folding cartons used in a range of fields including confectionaries, cosmetics, and pharmaceuticals, we are combining aesthetically pleasing base paper with structural design tailored to the application and appealing graphics, thereby further enhancing the value of our customers' products.

Paper Bag Business

We handle a wide range of customer needs-such as heavy-duty sacks for packaging used for safe and secure transport of various products, paper bags that are used for packaging of retail products which also play a role in sales promotions, and bags for home delivery, which are seeing increased demand given the growth in online shopping.





Awareness of Business Environment

- Increased consumer awareness about environmental issues
- Growing interest in renewable materials with the trend toward de-plasticization
- Economic development in emerging markets such as Southeast Asia and India
- Expansion of the e-commerce market
- Soaring raw material and fuel prices and large fluctuations in exchange rates

Business Opportunities and Risks

- Expanding sales by proposing a switch to paper packaging materi-
- Creating sales opportunities in collaboration with Oii Group companies in Japan and overseas
- Increasing market share through capital investment and M&A to meet rising demand ■ Soaring raw material and fuel prices
- and passing the cost increase on to product prices ■ Deterioration of base paper market conditions in China and Southeast

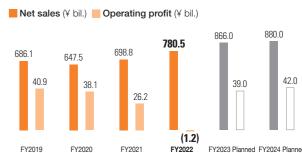
Our Strengths

- Stable supply and quality control system enabled by integrating base paper manufacturing and converting/processing
- Reduced environmental burdens through efficient base paper transportation, including at two integrated corrugated container plants in Japan
- Corrugated container processing bases at many locations in Southeast Asia and a strong containerboard sales organization around these bases

Changes in Net Sales Composition Ratio, Net Sales, and Operating Profit* Sales target for FY2030: $$\pm 1.250.0$$ billion

* Total of the Industrial Materials Business and the Household and Consumer Products Business





Segment Overview

In FY2022, the Household and Industrial Materials Businesses had net sales of 780.5 billion yen (up 81.7 billion yen from FY2021) and operating loss of 1.2 billion yen (down 27.4 billion yen from FY2021). In the domestic business, net sales increased with efforts for price revision in a number of products. Net sales of disposable diapers remained almost unchanged from the previous year. In the overseas business, net sales of containerboard and corrugated containers increased mainly due to higher sales in Southeast Asia and India and penetration of price increases, as well as the operation of new containerboard machines in Malaysia started in October 2021.

In FY2023, net sales of 866.0 billion yen (up 85.5 billion yen from FY2022) and operating profit of 39.0 billion yen (up 40.2 billion yen from FY2022) are planned.

Challenges for the Achievement of the Medium-term Management Plan and Priority Measures for 2023

- Further expand & enhance packaging business in Southeast Asia, India, and Oceania
- Expand & enhance corrugated container business in Greater Tokyo area, Japan

- Overseas : Build new plants, accelerate M&A
- Japan: Expand business through our own plants in the Greater Tokyo area and expand our market share through M&A in other regions

- Overseas: Build a new plant in India
- Overseas: Promote proactive capital investment
- Japan: Expand business in the Greater Tokyo area, mainly through new plants in Chiba and Tochigi
- Japan: Plan M&A

Further Expansion & Enhancement of Packaging Business in Southeast Asia, India, and Oceania

To meet the increasing demand for packaging in various regions, we own a total of 47 manufacturing bases in nine countries throughout Southeast Asia, India, and Oceania, and we are developing our business in the countries.

From 2022 to 2023, following the start of operation of new corrugated container plants in Malaysia (two plants) and Vietnam (two plants), in June 2023, we decided to construct our fifth corrugated container plant in India.

In Southeast Asia and India, we will continue to expand our business and increase our market share including through M&A. In addition, we will strengthen our business foundation by improving our competitiveness in terms of cost and quality by proactively introducing the latest equipment not only at new plants but also when renewing facilities at existing plants.

In Oceania, a new plant started operation in Christchurch, New Zealand in 2022, and we intend to expanding our business and strengthen our competitiveness through aggressive M&A in the corrugated container business including in Australia, as well

as by introducing the latest equipment to existing plants.

We will also work on the development of plastic alternative products to respond to the expected growing demand.



Our 6th corrugated container plant in Vietnam (started operation in August 2022)

45 | The Oji Group Integrated Report 2023 The Oii Group Integrated Report 2023 | 46

Main Overseas Sites Thailand Corrugated containers: 1 / Corrugated containers & folding Cambodia · Corrugated containers: 5 · Corrugated containers: 3 (including 1 site under construction) ◆New corrugated container plan in the south (2024-) Corrugated containers: 7 (including 1 site under construction) Folding cartons: 1 / Paper bags: 2 Myanmar ·Corrugated containers: 1 New corrugated container plant in the north (2023-) Malaysia ·Containerboard : 2 / Corrugated containers : 10 / Plastic bags: 1 New Zealand ♦New corrugated container plant in Selangor (2023-) packaging paper: 2/ Fiberboard · 1 / Corrugated containers: 3 / Paper bags : 1 · Corrugated containers: 1 Australia

Expansion & Enhancement of Corrugated Container Business in Greater Tokyo Area, Japan

In February 2023, an integrated containerboard processing plant in Utsunomiya City, Tochigi Prefecture, began operation, which had been constructed to meet increasing demand for corrugated containers in the Greater Tokyo area. It is the second integrated containerboard processing plant following the Kushiro Plant, in Hokkaido of the COMPANY.

The integrated plant is not only highly competitive in terms of cost and production efficiency, but also reduces greenhouse gas emissions generated during the transportation of containerboard. It is a corrugated container plant for the new era, which is also in accordance with the Group's long-term vision of building a sustainable society through our business activities. We will continue to make investments that contribute to both competitiveness and sustainability and meet the expectations of our stakeholders.



Integrated plant for corrugated containers in Tochigi Prefecture (started operation in February 2023)

Leading the Market as the Largest Integrated Paper and Corrugated Container Manufacturer in Malaysia



HPI Resources Berhad Group Managing Director Chang Kee Soon

Since 2010, Oji Group has established itself as a solid leader in the Malaysian corrugated container industry through strategic acquisitions of GSPP, UKB, and Harta. Continuous business expansion and M&As over the past 12 years have led to have a market share of 35% in Malaysia.

Our commitment to innovation and growth are visible in our state-of-the-art GSPP's 4th Plant (PP4) and UKB's 2nd Plant (UKB2), which are increasing the Oji Group's competitiveness in the Malaysian market.

As the largest integrated paper and corrugated container manufacturer in Malaysia, we are committed to providing our customers with competitive prices, outstanding quality, and sophisticated service while always being a responsible corporate citizen.

While demand remains sluggish, we will continue to work to modernize our facilities to optimize staffing and operating costs. In addition, GSPP's containerboard machine (PM3) with the state-of-the-art technology started operation in 2021. Through integrating the upstream and downstream to strengthen our packaging business in Malaysia, we will lead the market, and thus strive to maximize returns to our shareholders by being proactive and always looking forward.

Initiatives for Environmental Issues

At the integrated containerboard processing plant in Tochigi Prefecture, a solar power generation system with an output of 1.5 megawatts is being installed (scheduled for completion by the end of September 2023). It is not the first solar power generation system installed at our corrugated container plant, but having a larger output, this system will be able to cover the daytime electricity for the corrugated container processing section when weather conditions are favorable.

We are also working to install solar power equipment in existing plants if their weight does not exceed the allowable roof load or when the roof is repaired, and examining the possibility of fuel conversion for coal-fired boilers.

We will continue to work on initiatives for environmental issues along with business expansion.



Solar panels at the corrugated container plant in Tochiqi Prefecture (to be complet

Initiatives for Product Development

Development of Corrugated Cardboard Packaging Solution for Export Shipment of Car Seats

We developed a corrugated cardboard packaging solution for export shipment of car seats as an alternative to steel packaging material that had been used. The solution made all of corrugated cardboard are expected to reduce cost, reduce workload in packaging, and further facilitates recycling. In recognition of these, the solution received the WorldStar Winner in the WorldStar Awards 2023 organized by the World Packaging Organization (WPO).

To promote paper recycling, which is one of the Group's sustainable business models, we will continue to develop products that open up new possibilities for paper packaging materials.



Corrugated cardboard packaging solution for export shipment of car seats developed by Oji Container

"OJI FLEX PACK'AGE," Automated Packaging System

We sell "OJI FLEX PACK'AGE," automatic packaging system, which helps packaging adjust flexibly to the product size, and fanfold corrugated sheets "Rakudan," its packaging material. In addition to saving labor in packaging operations, they also help reduce greenhouse gas emissions by reducing the amount of materials used and transportation. This has been well accepted by customers in various industries as a next-generation packaging solution.

Having started the production of "Rakudan" in the Kansai region in June 2022 following the Kanto region, now we can offer this solution to an even more customers. We will further accelerate its market rollout and work to strengthen the foundation of the "Rakudan" business and reduce environmental burdens.



"OJI FLEX PACK'AGE," automated packaging system

47 | The Oji Group Integrated Report 2023



We will maximize the internal resources of the Oji Group to enhance the value of the "nepia" brand and deliver products that stand by people and the environment to our customers.

> Oii Holdings Corporation **Executive Officer**

President, Household and Consumer Products COMPANY

Takayuki Moridaira

Business Overview

Oji Nepia has developed the "nepia" brand of household paper and conducts its business activities with the aim of being a brand that stands by people's lives and the environment.

"Perceived quality for life" as in the seeking of good texture, comfort, and functionality. "Environmental Quality" as in the adoption of FSCTM certified paper for forest conservation and the tie-up with WWF. Oji Nepia pursues these two qualities and activities by integrating sales, marketing, and production functions. (FSC™ C018118)



Awareness of Business Environment

- Low birthrate and super-aging society
- Economic development in emerging markets such as Southeast Asia
- Hygiene awareness established since the COVID-19 pandemic
- Increased consumer awareness about environmental issues
- Soaring raw material and fuel prices and large fluctuations in exchange
- Change in consumer behavior due to successive price hikes of daily neces-

Business Opportunities and Risks

- Growing needs for eco-friendly prod-
- Capturing firm demand mainly in the Greater Tokyo area in Japan by improving production and logistics systems and strengthening branding
- Improving competitiveness by optimizing product lineup
- Soaring raw material and fuel prices and passing the cost increase on to product prices

Our Strenaths

- A wide range of eco-friendly products, including FSCTM certified paper and filmless boxed tissues
- Stable supply and quality control system enabled by integrating base paper manufacturing and converting/ processing
- Establishment of a finely woven product supply network with dedicated warehouses in the Greater Tokyo area

Challenges for the Achievement of the Medium-term Management Plan and Priority Measures for 2023

Business Strategy

- Enhance branding & expand sales of household paper products in Japan
- Expand & enhance overseas disposable diaper business

- Develop products that respond to domestic demand fluctuations and further enhance the value of the "nepia" brand
- Respond to changes in the overseas disposable diaper market environment
- Strengthen cost competitiveness and sales capabilities

Measures

- Strengthen the branding of "nepia" that stands by people's lives and the environment
- Domestic household paper: Expand products using FSCTM certified materials, implement events for the 20th anniversary of the "Hana-Celeb" brand, and renew existing household
- Overseas disposable diaper: Develop products that meet the needs of local consumers, expand sales channels for adult diapers, and thoroughly reduce costs

Enhancement of Branding and Expansion of Sales of Household Paper Products in Japan

Oii Nepia started using FSC[™] certified paper in 2011 ahead of others in the industry. Since then, it has continued to produce environmentally-friendly products, adopting biomass film and ink and developing products using paper instead of film for packaging.

In the Japan Sustainable Brands Index (JSBI) 2022, a corporate brand survey regarding SDGs as viewed by consumers* published in February 2023, Oji Nepia was ranked fourth (of 306 companies), and the first (of 17 companies) in the ranking by industry, in the "Cosmetics and Toiletries Cate-

* Survey by Sustainable Brands Japan (15,300 samples nationwide, web survey, male and female aged 18-79, 306 companies)

Initiatives for Product Development

Launched "nepia Hana-Celeb facial towel"

In response to concerns about cloth towel hygiene and dissatisfaction with rough or fluffy textures when wiping moisture from the face after washing, we developed a new "nepia Hana-Celeb facial towel" suitable for gently wiping wet skin. Compared to Hana-Celeb boxed tissue, it absorbs water about three times faster, boasts double the strength when wet, and its embossed sheet quickly wipes away moisture from the face. Containing the same triple moisturizing ingredient as used in Hana Celeb Tissue, a proprietary technology of nepia, it also provides a soft feel even with a larger thickness. We will continue to develop products that bring consumers' desires to life.



Initiatives for Environmental Issues

Launched "nepia nepinepi Tissue Filmless Box, 5-Pack 400 Sheets (200 Sets)"

We developed a filmless box having no film on the opening, which users can just push to take out tissues. The structure of the box eliminates the film while still ensuring a smooth tissuepicking experience. The box is designed to be opened easily by simply pressing on the opening at the beginning of use and produce no waste. After use, the box can be effortlessly folded for direct recycling as paper waste. In addition, eliminating the film on the opening has reduced about 25% of the plastic used in the product, making it an environmentally-friendly product that saves resources and plastic.





Functional Materials Business



We aim to expand the business by enhancing the added value of existing products, as well as developing "Only One" products and strengthening sales activities for them.

> Oii Holdings Corporation **Executive Officer** President, Functional Materials COMPANY

Shigeki Aoki

Specialty Papers Business

The Specialty Papers Business has a lineup of products with advanced special functions such as electrical material paper including insulation materials, dry pulp non-woven fabric excellent in bulkiness and liquid retention, and glass paper excellent in size stability and heat resistance.

Imaging Media Business

The Imaging Media Business at the Oji Group develops thermal recoding media that meet customer needs for household, industrial, logistic, medical, and other various uses, leveraging diverse coating technologies, boasting a top class global market share.

Adhesive Products Business

Using proprietary adhesive force control technology, the Adhesive Products Business handles from familiar products like food/beverage labels, courier labels, adhesive tape for packaging, and wound dressings to less familiar, special applications like aluminum tape for construction material and forgery prevention tape.

Film Business

The Film Business handles OPP films for film capacitors to be incorporated in motor control PCUs of electric vehicles, developed based on its thin film technology that produces the world's thinnest films, and optical double-sided adhesive films and hard-coated films that are adopted for smartphones and other precision devices.

Glass paper (Oji F-Tex)



Thermal paper for tickets (Kanzaki Specialty Papers)



Biodegradable pressure-sensitive adhesive paper for labels (Oii Tac)



Film used in capacitors (Oji F-Tex)

Awareness of Business Environment

- Progress of global shift to a decarbonized society
- Growing interest in highly functional de-plasticization
- Economic development in emerging markets such as South America and Southeast Asia
- Soaring raw material and fuel prices and large fluctuations in exchange

Business Opportunities and Risks

- Increasing demand for the capacitor-use OPP films due to the rapid popularization of electric vehicles
- paper products with the trend toward Increasing demand for functional paper materials due to growing needs for environmentally-friendly products for de-plasticization or reduced plastic use
 - Strong thermal paper demand in South America and growing demand for high performance labels in Southeast Asia
 - Foreign exchange fluctuation risks and security/safety situation risks in overseas becoming visible due to the diversity of production base locations

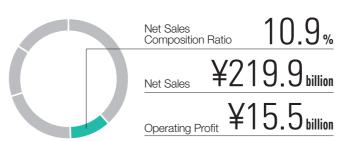
Our Strengths

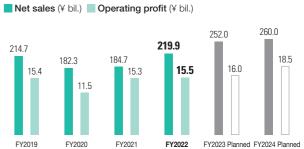
- We have high levels of core technologies in "papermaking," "converting (functional and adhesive coatings)," and "film
- Organizational structure for agile development of highly functional, high value-added products including environmentally-friendly products
- Top global market share in the imaging media business
- Integrated production from base paper manufacturing to converting

Changes in Net Sales Composition Ratio, Net Sales, and Operating Profit



¥400.0billion





Segment Overview

In FY2022, the Functional Materials Business had net sales of 219.9 billion yen (up 35.2 billion yen from FY2021) and operating profit of 15.5 billion yen (up 0.2 billion yen from FY2021). In the domestic business, sales of specialty paper increased due to price revisions, despite a decrease in sales volume. Sales of thermal paper increased due to a recovery trend in demand, which had declined due to the impact of the COVID-19 pandemic, as well as price revisions. In the overseas business, sales increased due to a recovery in demand for thermal paper, spread of price increases, and the operation of a new facility in Brazil.

In FY2023, net sales of 252.0 billion yen (up 32.1 billion yen from FY2022) and operating profit of 16.0 billion yen (up 0.5 billion yen from FY2022) are planned.

Challenges for the Achievement of the Medium-term Management Plan and Priority Measures for 2023

Business Strategy

- Actively develop high-function and eco-friendly products
- Expand global sales of the imaging media business and enhancing competitiveness including printing and con verting

Challenges

- Accelerate the development of high-function, high value-added, and eco-friendly products
- Expand business in Japan and the Asian region through M&A

Measures

- Realize effects of investment in the capacitor-use OPP film facilities in Japan and thermal paper facilities overseas early
- Japan: Increase market share by adding more value to existing products, developing "Only One" products, and strengthening sales and marketing
- Overseas: Realize synergies from the inclusion of the Adampak Group early

Actively Develop High-function and Eco-friendly Products

In Japan, we have worked to develop products with high functionality and high added value with considerations for environmental issues.

In the field of film products, we developed an eco-mark certified "heat shielding window film" that combines high heat shielding properties and light transmittance. In the field of paper, we developed "Semi-Through," translucent thermal paper through which the backside of the label or the contents of the package is visible, and in the field of non-woven fabric, "kinarito," a biodegradable non-woven fabric material made mainly from plant-derived cellulose and polylactic acid, and a water soluble "Texcell" series made of 100% natural materials. We also worked on the development of "Cellulose Mat" and "Fine Press W" for press molding using wood pulp as a substitute for plastic, and "Cellulose Resin Pellets" for injection molding.

In recent years, we have also developed new products to respond to the accelerating rise of expectations to address environmental issues in the agricultural materials field. Our product lineup includes "CALFRESH", a fruit and vegetable packaging film that reduces industrial waste and food loss; "OJI Sustainable Mulching Sheet ," a paper mulching sheet that biodegrades after agricultural use as a mulching sheet; and "HyBioth," a biodegradable, water soluble non-woven fabric made primarily from natural pulp. Thus, we are developing new products to meet immediate user needs.

In response to the rapid popularization of electric vehicles due to a globalized trend toward decarbonized society, we will add two more units of production equipment for the capacitor-use OPP films in motor drive controllers at Oji F-Tex Shiga Mill, one of which has been operating since July 2023 and the other is scheduled to start operation in FY2024. As a result, the production capacity is expected to double from the February 2022 level.





Agricultural mulching sheet "OJI Sustainable Mulching Sheet"

Functional Materials Business

SILBIO Series

In the midst of the growing needs for paper products as replacement for plastic packaging, "SILBIO series" has a lineup well-suited for light packaging applications in various fields, including a product that not only provides barrier property to paper packing materials but also has barrier and light-shielding properties as high as aluminum deposited film, a product that has transparency and barrier properties, a product that requires no sealant such as PE. The lineup consists of the following.

"SILBIO BARRIER" which has oxygen barrier property as high as EVOH, and moisture barrier property as high as LDPE, preventing contents from diffusing moisture or scent. "SILBIO ALBA," aluminum deposited paper material which has oxygen barrier, moisture barrier, light-shielding and heat sealing properties, and is most suitable for applications requiring high barrier and concealability. "SILBIO CLEAR" which has a transparent feature in addition to barrier and heat sealing properties, and is most suitable for packaging for items whose contents you want to show such as food and daily products. "SILBIO EZ SEAL" which has no barrier property, but is specialized in its easy heat sealing feature without using sealant, and is most

suitable for secondary and delivery packaging for food, and industrial material packaging.

The SILBIO series products can bear a paper identification mark, and is adopted by customers who appreciate its features as packaging materials for food and soap.



Expanding Global Sales of Imaging Media Business and Enhancing Competitiveness Including Printing and Converting

Overseas, we have completed enhancing and expanding facilities to practically double production capacity, and started full operation in Brazil in order to meet strong demand for thermal paper in South America. In Europe, construction work has started to increase the capacities of thermal paper production facilities, which are scheduled to start operation in January 2024. In addition, in September 2022, Adampak Group, a high performance label printing and converting company with its business bases in Southeast Asia and China, became a member of the Oji Group. This addition of the high performance label business for electric products and healthcare products to the thermal paper and adhesive paper business already operating in Thailand and the high performance label printing/converting and cutting/converting business in Malaysia has enabled the integrated production from base paper manufacturing to converting. In the Asian market, which is expected to continue to grow further, we will propose a wide



Adampak Group (Head Office in Singapore)

range of timely and optimal label products to increase customer value, by picking up a broad range of customer needs in the high performance label market and feeding them back to the upstream business to realize synergetic effects early.

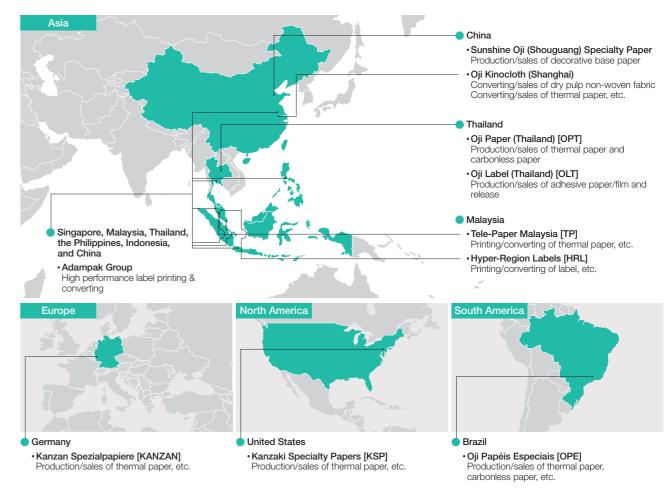
In the emerging markets in Southeast Asia, South America, the Middle East, and Africa, to meet the demand growing with economic development, we will aim to expand the areas in which we operate while strengthening our competitiveness at our existing bases, based on the Group's core technologies which are strengths we have cultivated to date in "papermaking," "converting (functional and adhesive coatings)," and "film forming."

While continuing to advance our development of environmentally-friendly materials and products, we will keep on anticipating market needs and proactively working to expand into new business areas so as to promptly provide products and services that exceed expectations.



Adampak Group (Letterpress label printing presses at Aident Corporation in Malay sia, a subsidiary of Adampak Group)

Main Overseas Sites



Creating Synergies among Group Companies to Further "Stick with Us"

Adampak Pte. Ltd. Tan Kok Kuang

Established and headquartered in Singapore since 1979, Adampak operates manufacturing footprint of seven plants across six countries in Asia i.e. Singapore, Malaysia, Thailand, Philippines, Indonesia and

Adampak's regional presence is complemented by state-of-the-art production capabilities including technologically advanced digital printing, multi-color high speed flexographic and letterpress presses, precision die-cut machines as well as high-speed video auto-visual inspection units.

Adampak is the preferred partner for multi-national companies requiring premium, customized and high-performance label solutions including RFID tags as well as precision die-cut components across the globe, Adampak serves a wide spectrum of end markets i.e. Storage, Electronics, Power & Renewables. Automotive. Logistics and Healthcare.

Adampak has built up a strong brand and reputation across its diversified and blue-chip customers based on its excellent quality level, customer service, competitive pricing and on-time delivery. This has resulted in long-term and sticky relationships i.e. in-line with Adampak's slogan of "Stick with Us".

Oii Holdings acquired Adampak Group on September 1, 2022 and together with Oji's technologically advanced products plus market leadership presence, Adampak is fully geared towards Oji's vision of being our customer One Stop Packaging Solution provider.

Forest Resources and Environment Marketing Business

Yuji Onuki



We are comprehensively leveraging wood resources including pulp, renewable energy, afforestation, and lumber processing to promote enhancement of the business.

Oji Holdings Corporation **Executive Officer** President, Forest Resources and Environment Marketing COMPANY

We produce a diverse lineup of pulp grades including hardwood and softwood kraft pulp, and dissolving pulp. With 2.5 million tons per year market pulp supply capacity, we sell our products globally including in Asia, Europe, and North Amer-

Energy Business

Pulp Business

We are promoting the electric power generation business by establishing and expanding electricity generation facilities using renewable energy, including wood biomass, hydroelectric power, and solar power. Leveraging our sites in Japan and overseas, we are also working to strengthen purchase and market supply of biomass fuels in line with the energy business expansion.

Lumber Processing Business

We are expanding production capacity, and are purchasing and selling lumber and processed lumber products, primarily in Asia and Oceania. In Japan, we are also seeking to strengthen profitability through sales expansion into the building materials field and other measures.

Forest Plantation Business

We grow and manage company-owned sustainable forests in Japan and overseas. Harvested wood are supplied for pulp raw materials, as well as for a range of applications such as lumber, plywood materials, and biomass fuels. With the goal of 400,000 ha of overseas production forests, we are also acquiring lands and expanding forest plantations.

• Fuels/Chemicals and Other Material Procurement Business

Our centralized purchasing team buys a variety of chemicals and raw materials that are competitive and sustainable. We are committed to environmentally sustainable and socially responsible procurement in complying with Oji Group Partnership Procurement Policy.

Starch and Saccharification Business

We have been developing technologies for starch and saccharification products, primarily of corn, to provide products that meet the needs of our customers.



Dissolving pulp (for general rayon and special items)





Nursery where eucalyptus varieties are selected and raised

Awareness of Business Environment

- Growing demand for pulp due to economic development in newly industrialized countries and the trend toward Expanding and improving competitivede-plasticization
- Global moves to increase pulp production capacities
- Intensifying competition for procurement of wood resources
- Rising raw material and fuel prices, labor costs, etc.

Business Opportunities and Risks

- Expanding and strengthening overseas
- ness through M&A and strategic invest-
- Securing forest resources by expanding plantations
- Market fluctuation risk due to social and economic conditions, currency exchange rates, natural disasters, etc.

Our Strengths

- Abundant and sustainable forest resources and know-how in forest management
- Integrated production from forest management to lumber processing and pulp Organization for production and sale of
- diverse types of pulp ■ Procurement and sales capabilities that leverage the Group's collective strengths

and domestic and overseas bases

Changes in Net Sales Composition Ratio, Net Sales, and Operating Profit Sales target for FY2030:





Segment Overview

In FY2022, we had net sales of 423.8 billion yen (up 103.2 billion yen from FY2021) and operating profit of 68.5 billion yen (up 13.3 billion yen from FY2021). In the domestic business, despite the impact of higher raw materials and fuel prices on the pulp business, sales and profits increased due to strong demand and rising market conditions. In the energy business, sales increased due to an increase in the amount of electricity sold as a result of the start of operation of a new biomass power plant in Tokushima Prefecture in December 2022. In FY2023, because sales and profits are expected to decrease due to the global decline in the pulp market, net sales of 375.0 billion yen (down 48.8 billion yen from FY2022) and operating profit of 18.0 billion yen (down 50.5 billion yen from FY2022) are planned.

Challenges for the Achievement of the Medium-term Management Plan and Priority Measures for 2023

Business Strategy

- Expand & enhance pulp business as a "comprehensive pulp manufacturer"
- Propel renewable energy and other energy businesses
- Expand lumber processing business

Challenges

- Pulp business Expand production and sales volume toward market growth
 - Strengthen cost competitiveness and sales capabilities
- Energy
- Expand the renewable energy business
- Strengthen biomass fuel procurement business ■ Strengthen sales capabilities for lumber
- Lumber products processing
- Expand the lumber production business business

Measures

- Conduct investigations for modernization and stable operation of pulp facilities, strengthen cost competitiveness, and explore possibilities to increase production capacities
- Expand power generation and the lumber processing businesses leveraging our forest re-
- Acquire lands and expand forest plantations to secure forest resources

Enhancement and Expansion of Pulp Business

We continue to implement strategic profit measures at key business sites to reinforce business foundations that are resilient to fluctuations in pulp markets.

CENIBRA (Brazil)

- Enhance cost competitiveness and sales capabilities, and consider production increase, upon holding all voting rights of the company in May 2021
- Install most advanced & work saving manufacturing facilities

Pan Pac (New Zealand)

■ Consider production increase to meet growing demand for folding cartons

Oji Fibre Solutions (New Zealand)

- Made the company a wholly-owned subsidiary in March
- Implement measures to stabilize operations, improve yields, and conserve energy by introducing Oji Group's operational techniques and management methods

Dissolving pulp

■ Work to increase production and sales of dissolving pulp with growth potential in light of increasing demand for apparel, as well as to increase sales of high-value added products



Pulp being loaded onto a ship (Brazil)

55 | The Oji Group Integrated Report 2023 The Oii Group Integrated Report 2023 | 56

Main Overseas Sites (Pulp Production Sites)

Annual production capacity of market pulp

Japan (Mills in Japan) 160,000 tons

200,000 tons

Types of pulp ● Hardwood kraft pulp ▲ Softwood kraft pulp ■ Dissolving pulp ◆Pulp for cement ❖ BC-TMP



CENIBRA Mill (Belo Oriente, Minas Gerais, Brazil)



Oji Fibre Solutions Tasman Mill (North Island, New Zealand)

Initiatives for Environmental Issues

Awarded the Gold Medal in the EcoVadis Sustainability Assessment

CENIBRA received the Gold Medal in a sustainability assessment by EcoVadis, an international assessment organization for supply chains based in France. In the assessment, companies are rated from the four aspects of environment, labor and human rights, ethics, and sustainable procurement. The Gold Medal is awarded to the top 5% of more than 100,000 eligible companies worldwide. The award solidifies the company's position of excellence under the circumstances of increasingly high environmental and social standards expected of corporations.

For CENIBRA's Sustainability Advisor, Sandro Morais Santos, such a remarkable performance in EcoVadis assessment is evidence of the Company's commitment and adherence to the best ESG practices.

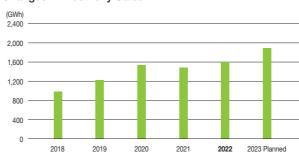
According to Sandra Maria Henrique, coordinator for Governance and Compliance at CENIBRA, this result proves that sustainability concept and practices have been maturing continuously throughout the Company's growth and evolution.



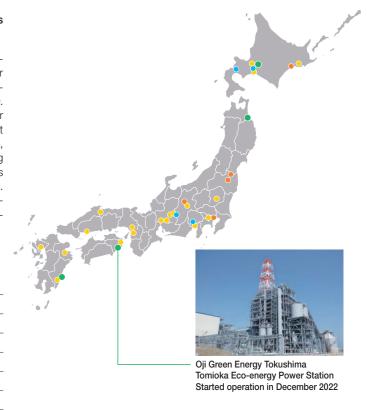
Expanding Renewable Energy and Other Energy Businesses

In the energy business, we continue studying for various projects to strengthen our renewable energy business. In December 2022, a biomass power generation facility in Tokushima Prefecture built as part of a joint venture with ITOCHU ENEX CO., LTD. commenced operations. We are also conducting studies for wind power generation projects utilizing company-owned forest lands in Japan. For the procurement of biomass fuels, in Japan, we are increasing the production of fuel woodchips by making use of unused wood resources as well as fully utilizing branches (small branches and leaves), which were previously abandoned. Overseas, we are working to increase procurement of palm kernel shells for use as fuel in Indonesia and Malaysia, while ensuring lawfulness and sustainability.

Changes in Electricity Sales



The Oji Group owns and manages 188,000 ha of forests in Japan. This is the largest of all forests owned by private corporate entities in Japan. The Group initially owned forests primarily for producing raw materials for paper. However, now we have been enhancing the multi-faceted values of forests, including environmental contribution through forest management.





Urahoro larch forest (Hokkaido)



Oji Yoshimoto Seizai's lumber mill

Voice

CENIBRA celebrates its 50th anniversary



Director, CENIBRA

In September 2023, CENIBRA will celebrate its 50th anniversary, and I also celebrate 30 years of my working at the company that welcomed me as a trainee engineer, became my second home, and allowed me to build a solid career of which I am very proud.

Since 2008, our annual production has been 1.2 million tons of high-quality bleached eucalyptus pulp, mainly exported to customers in Europe, Asia, and the USA. However, we weren't born big. We began with 0.26 million tons per year, and we grew and reinvented ourselves to quintuple the original production, and by the end of 2023 we will have produced close to the 35 million tons produced in our history.

We will see our 50th birthday with a renewed determination to take on further challenges to embody Oji's Purpose of "Grow and manage the sustainable forest, Develop and deliver the products from renewable forest" to contribute to the sustainability of the world and the Oji Group.

Júlio Ribeiro

Printing and Communications Media Business



We are increasing profitability and competitiveness by implementing the production system restructuring, etc. in light of demand structure trends through cooperation across Group segments.

> Oji Holdings Corporation **Executive Officer** President, Printing and Communications Media COMPANY

Takayuki Moridaira

Tomakomai Mill, one of the world's leading newsprint mills, produces high quality newsprint with features requested by customers, such as lighter weight and improved print reproducibility, making full use of a wide variety of pulp. We hold approximately 30% share of the Japanese market with a stable supply to customers throughout the country including the Greater Tokyo area. Newsprint production using a large amount of recovered paper also contributes to paper recycling.

We offer a wide range of printing papers to meet various needs, including art paper used for photo albums and high-end catalogs, coated paper used for magazines and flyers, and woodfree paper used for books, each of which play a role in day-to-day communication of information. We also offer a full lineup of environmentally-friendly printing paper, including FSC-certified paper and products compliant with the Green Purchase Act.

We provide various output media to support information processing systems, including copying paper and forms. Produced with our carefully built quality design and quality control system, they can be used on printers with different printing methods and models. We offer high quality products not only superior in printability and workability in converting, but also capable to meet the need for printing at ever-higher speeds for productivity improve-







Awareness of Business Environment

- Revitalized economic activities after the Advantages of paper as an information pandemic
- Increased consumer awareness about environmental issues
- Shift to paperless office with further utilization of ICT and spread of teleworking,
- Soaring raw material and fuel prices and large fluctuations in exchange rates

59 | The Oji Group Integrated Report 2023

Business Opportunities and Risks

- medium (visibility, readability, reliability, preservability, texture unique to paper, reproducibility of photographs, etc.)
- Strengthening competitiveness through cooperation within the Group beyond the boundaries of businesses
- Growing demand for environmentally-friendly paper products due to heightening awareness for the environment
- graphic paper ■ Soaring raw material and fuel prices and passing the cost increase on to product

■ Continuous decrease in demand for

Our Strengths

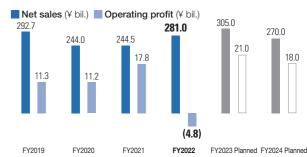
- Large existing infrastructure including pulp production facilities and biomass power generation facilities
- Full lineup of environmentally-friendly products, including FSC-certified paper, eco mark certified products, and products compliant with the Green Purchase Act
- Capabilities to develop products meeting market needs

Changes in Net Sales Composition Ratio, Net Sales, and Operating Profit



¥150.0billion





Segment Overview

In FY2022, we had net sales of 281.0 billion yen (up 36.5 billion yen from FY2021) and operating loss of 4.8 billion yen (down 22.6 billion yen from FY2 0 2 1). In the domestic business, although demand for newsprint continued to decline, net sales of newsprint were on a par with the previous year due to price revisions. Net sales of printing paper increased from the previous year due to rising demand for domestic products caused by decrease in imported paper, as well as price revisions. In the overseas business, net sales increased from the previous year at Jiangsu Oji Paper Co., Ltd.

In FY2023, net sales of 305.0 billion yen (up 24.0 billion yen from FY2022) and operating profit of 21.0 billion yen (up 25.8 billion yen from FY2022) are planned.

Challenges for the Achievement of the Medium-term Management Plan and Priority Measures for 2023

Business Strategy

Restructure production system and enhance competitiveness through collaboration with other Group segments by maximizing the use of assets owned

Challenges

- Utilize owned resources effectively
- Focus always on cash flow

Measures

- Maintain product selling prices revised in FY2022 in response to continued increase in raw material and fuel prices
- Continue with thorough cost reduction
- Strengthen cooperation with other segments

We are working to improve profitability and competitiveness, by deepening cooperation with other segments in the Oji Group, anticipating future demand trends, and maximizing effective use of pulp manufacturing facilities, biomass boilers, and other assets

In October 2021, we converted a newsprint machine to a machine for manufacturing containerboard at Tomakomai Mill. In April 2022, we started operation of a special liner and special paperboard machine relocated from Nayoro Mill of Oji Ma-

teria at the same mill. Overseas, utilizing existing pulp manufacturing facilities and biomass boilers, etc., we built a new

household base paper machine at Jiangsu Oji Paper (China). (Started operation in 2020)



(retrofit of the #N-5 machine) at Tomakomai Mill

Initiatives for Environmental Issues

Electric power is indispensable for paper manufacturing. The Oji Group owns various types of power plants in Japan and works to secure power sources for its mills while engaging in the electricity sale business.

Among all, our Chitose No. 1 Hydroelectric Power Plant, built in 1910, is the oldest industrial power plant still in operation in Japan. The five hydroelectric power plants in the Chitose River basin have a generating capacity of 37,000 kW and are important sources of power for the Oji Paper Tomakomai Mill, located about 25 km away. They also supply power to customers around the Lake Shikotsu. After the Hokkaido Eastern Iburi Earthquake in September 2018, the power plant was restored in about an hour and a half, making it the only power

plant in Hokkaido to escape a blackout. Hydroelectric power generation has been attracting attention recently as a renewable, clean energy source with high energy conversion efficiency that emits no greenhouse gas from power generation. We will continue to contribute to the realization of a sustain-

able society through various approaches, including the effective use of energy.



Chitose No. 1 Hydroelectric Power Plant

The Oji Group Integrated Report 2023 | 60

Corporate Management Group and Shared Service Companies



Environmentally-friendly paper food containers proposed by Kyokuyo

Kvokuvo

Kyokuyo Co., Ltd. is a trading company that proposes and develops solutions to customers' problems from users' perspective. It purchases and sells various products of the Oji Group and other companies mainly in paper and packaging fields. These products include synthetic resin materials and products, packaging materials, chemicals, and machinery, from upstream (raw and other materials) to downstream (finished products). Leveraging its proposing ability, development ability and comprehensive ability to accommodate diversifying needs in the changing social environment, it is working to evolve paper and packaging, pursuing to create a more enriched society.



Industrial water production system

Oji Engineering

Oji Engineering Co., Ltd. leverages its technologies accumulated at paper mills to offer one-stop engineering services ranging from proposals on facility design to proposals on operation methods. Under strict safety and construction quality control, the company responds rightly to customer needs through work management utilizing full use of IoT, and precise designing using 3D scanners and 3D CAD. It also explores new needs and provides solutions, for example, in the field of environmental business, such as wastewater treatment and renewable energy, or remote maintenance using thermal camera drones.



Environmentally-friendly containers using ISCC-certified biomass plastic

Ginpo Pack

Ginpo Pack Co., Ltd. is a manufacturer which conducts integrated planning, production, and sales of plastic containers for food packing. It offers high-quality packages with unique packaging materials, using its many patents and state-of-art technologies. The new material "Pulfine" in which a high foaming ratio is realized with a single material, is more resistant to heat and more durable than ever and can reproduce steaming hot home cooking when using a microwave oven. Ginpo is also committed to the development of environmentally-friendly containers using plant-derived biomass plastic.



A roll-on roll-off (RORO) ship that can transport vehicles carrying goods

Oii Logistics

As a shared service company, Oji Logistics Co., Ltd. operates mainly domestic and international logistics services for Oji Group products. In 2022, it made full-scale entry to 3PL (third party logistics) services, using Urayasu Branch as its base. It is now changed into a warehouse, operating 24 hours a day and 365 days a year as a hub for consumer goods and e-commerce whose demand is growing mainly in the Greater Tokyo area. It is also accommodating a change in the operating environment surrounding the logistics industry such as "Logistics 2024 Issue," to earn trust from customers of the Oji Group and other companies.



Hotel New Oii

Hotel New Oji Co., Ltd. is engaged in the hotel and flight catering businesses. Grand Hotel New Oji, a 16-story city hotel which is located in the center of Tomakomai City, Hokkaido and has banquet halls, three restaurants (Japanese, Western, and Chinese), bar, and shops, is a landmark in Tomakomai. In addition to this hotel business, we prepare a wide variety of high quality inflight meals for domestic and overseas airlines in the catering building at the New Chitose Airport and also load the meals onto aircraft using large, specialized vehicles.



Oji Homes Aoyama (Minamiaoyama, Minato-ku, Tokyo)

Oii Real Estate

Oji Real Estate Co., Ltd. is a general developer active nationwide in the management and effective utilization of the Oji Group's owned land and the development and sales of quality-oriented condominiums, single-family homes, and developed residential land, as well as lease and management of office buildings, condominiums, and commercial facilities, and the renovation business. It also has a construction and design division (first-class registered architect office) with good reputation for its technical capability, and conducts design, supervision, and consultation in a wide range of areas including factories and plants as well as public and private facilities.



Oji General Hospital

Oji General Hospital has 440 beds (of which eight are in the ICU) and 25 departments, providing advanced and quality medical care as a key hospital in the Higashi-iburi and Hidaka medical area. It is designated as disaster base hospital, designated cancer care hospital, and regional perinatal maternal and child medical center, and also provides guidance and training for residents as a designated clinical training hospital. In addition, it has the geriatric health services facility, "Care Life Oji," in-home nursing care supporting office Oji, and the central regional comprehensive support center entrusted by Tomakomai City, working to provide safe and secure medical service.



Drink cartons made using base paper manufactured by the Oji Group

Ishizuka-Oji Paper Packaging

Ishizuka-Oji Paper Packaging Co., Ltd. operates the paper beverage container business by combining the Oji Group's expertise in manufacturing and processing paper with ISHIZU-KA GLASS Co., Ltd.'s expertise in processing and filling paper containers for a diverse range of contents. By having in place a domestic integrated production system covering papermaking of base papers through to laminate processing and beverage packaging, and selling superior filling equipment from both Japan and overseas, as well as providing service and maintenance, it is working to ensure the stable supply of high-quality, safe, and dependable products to dairy and beverage manufacturers throughout Japan.

61 | The Oji Group Integrated Report 2023 The Oji Group Integrated Report 2023 | 62