

As we face a challenging year, amid dramatic changes in the world around us, I would like to look back on the path the Oji Group has taken to get where we are today, and present my opinion on our path into the future.

The Oji Group will continue to progress, with the commitment to contributing to the building of a sustainable society through the enhancement of corporate value.

I. Introduction

I would like to begin by expressing my deepest condolences for those who have lost their lives as a result of COVID-19 and their bereaved families, and my earnest sympathies for those currently battling the disease. I would also like to express my respect for the officials and health-care workers who are making every effort to prevent the spread of the infection.

The Oji Group's Vision for a Sustainable Society

Masatoshi Kaku

Representative Director of the Board,
President and Group CEO



These hardships have helped all of us realize how precious our normal lives, which we used to take for granted, are and that a company is an entity that lives in harmony with society. At the Oji Group, we will do our utmost to fulfill our role, doing our part to bring this pandemic under control as soon as possible. We are utilizing our expertise, and have decided to increase production of masks and non-woven fabric used in isolation gowns. We also sell many products that play a vital part in maintaining everyday life, such as health and sanitary products including tissue paper and toilet paper, the corrugated containers and folding carton products that support logistic services, and newsprint to convey information. We will ensure the continuation of production activities, while thoroughly implementing measures to prevent infection, and strive to provide society with a little peace of mind.

II. Sustainable Growth as a Corporate Group Required by Society

The Oji Group's DNA passed down since our founding while responding to social change

The origins of the Oji Group can be found in 1873, when Eiichi Shibusawa established Shoshi Kaisha with the aim of developing the domestic paper manufacturing industry. He was committed to supporting social and economic development in Meiji Era Japan through the proliferation of books and newspapers to raise the level of knowledge of the public. Today, we engage in a wide range of businesses, including printing and communications paper and newsprint in the Printing and Communications Media Business that draws upon the roots, as well as packaging materials such as corrugated containers, household paper, and disposable diapers in the Household and Industrial Materials Businesses, specialty paper, thermal paper, adhesive paper, and film products in the Functional Materials Business, plantation forest maintenance and management, the manufacture and sale of pulp, and the supply of electricity utilizing renewable energy in the Forest Resources and Environment Marketing Business. Besides, our businesses have expanded globally. During our long history, spanning 150 years, we have greatly expanded our business domains and geographical spread. There is one way of thinking, however, that we have always emphasized in our management and business operations: our founding spirit.

We are the successors to the philosophy of "unity of economy and morality" advocated by Eiichi Shibusawa, who is our founder and deemed the father of the modern Japanese economy. Even as the business world is going global and approaches to work styles and management are diversifying, we value our corporate social responsibility based on the philosophy.

Enhancing corporate value and contributing to a sustainable society through the three facets of our management philosophy

Our **management philosophy** upholds the "Creation of Innovative Value," "Contribution to the Future and the World," and "Harmony with Nature and Society." Just keeping the tradition alive will not lead us to increase corporate value in a constantly changing society. We believe that by realizing the concept of "challenging manufacturing" to fulfill both present and future needs, our technology and experience cultivated over the years can keep supporting people's lives into the future in various forms. In order to continue to bring "innovative value" to society in anticipation of changing needs of society, we will embrace change (transformation) and demonstrate our ability to tackle hardships inherited from the forerunners who have overcome the economic turmoil throughout history.

Management Philosophy

"Creation of Innovative Value"

Promptly detect changes in values across broad fields of society and strive to offer "innovative value" that fulfill society's latent needs by promoting "challenging manufacturing" based on novel ideas.

"Contribution to the Future and the World"

Continue to be a global enterprise that provides "innovative value" to all countries, regions, and creating a new future.

"Harmony with Nature and Society"

Actively address environmental problems and contribute to the realization of a sustainable society for the sake of continual existence and flourishing with nature and the Earth.



The corporate group image expressed by the slogan “Beyond the Boundaries”

With its history spanning 150 years, the Oji Group is often regarded as a “long-established, traditional paper company.” In reality, “transformation” has always been a key part of our history. I would like to take this opportunity to look back on one of the great transformations we have undergone in recent years: our transition to a pure holding company structure in 2012.

From the early 2000s, the business environment gradually began to change due to factors such as Japan’s aging population and declining birth rate, the development of information and communications technology, and the rise of imported paper. It was transformed dramatically through the global financial crisis in 2008. In particular, the supply-demand structure in paper manufacturing, one of our main businesses, underwent profound change, which forced us to reconsider the structure of our organization on the premise that the market would shrink. In 2012, we transitioned to a holding company structure, with the aim of clearly demonstrating, both within and outside the Oji Group, our strategy and policy of pushing forward strongly with business restructuring. Our **new slogan “Beyond the Boundaries”** was created in tandem with the transition. It expresses our determination to move forward into the future as a truly global company by actively going beyond various “boundaries” including business domains, national territories, and the individual abilities of our employees, to contribute broadly to society and the world. The Oji Group has made a fresh start, sharing with its employees and other stakeholders the positive attitude that it is willing to take on the challenge of overcoming old customs and mindsets to confront the changes in the business environment.

III. Changes in the Oji Group’s Environment, Medium- to Long-Term Outlook and Challenges

Management direction from the transition to a holding company structure through the FY2016–2018 Medium-term Management Plan

The transition to a holding company structure prompted us to launch full-fledged efforts to break away from the

Performance Indicator Targets Under the FY2019–2021 Medium-term Management Plan

- Consolidated operating profit: At least **150 billion yen**
(maintain stable operating profit of more than 100 billion yen)
- Overseas sales ratio: **40%** (with a target of more than 50% in the short term)
- ROE: **10.0%**
- Net D/E ratio: **Maintain current status** * FY2018 result: 0.7 times
- Market capitalization: At least **1 trillion yen**

business structure that was overdependent on domestic demand of papermaking and other businesses. In response to the shrinking market of the domestic Printing and Communications Media Business, we have pursued the optimal manufacturing system, generated cash flows and management resources, and reallocated them to other promising businesses and growth areas overseas. These initiatives have finally started to bear fruit. In FY2018, the final year of the previous medium-term management plan, we not only achieved our long sought-after target of consolidated operating profit of 100 billion yen, but also firmly established a structure to bring in profit from overseas, raising the overseas sales ratio, which had been less than 10.0% in FY2010, to as high as 32.0%. We also achieved our targets for reducing interest-bearing debts with room to spare, building a financial foundation for our next growth strategy.

Goals of the FY2019–2021 Medium-term Management Plan

The Oji Group ended the previous medium-term management plan in FY2018 with consolidated operating profit of over 100 billion yen. On the other hand, we identified three issues as challenges for continued growth. Firstly, greater-than-expected shrinkage of the Japanese market deteriorated the utilization ratio of manufacturing facilities, and reduced our domestic business’ earnings capacity. Secondly, we should expand the overseas business, especially in the growing Southeast Asian and Indian markets. Specifically, we need to strengthen vertical integration from upstream raw materials to downstream conversion in the corrugated container business, and reinforce the local production systems in the disposable diaper

business. Thirdly, in response to the shrinking paper market, we need to develop the third core material that will lead to the building of a sustainable society, and swiftly commercialize it. Doing so requires that we further hone our core technology cultivated through papermaking.

Under the current medium-term management plan spanning the three years from FY2019 to FY2021 launched last year, we set forth three pillars of the fundamental policy - **“1. Profitability Improvement of Domestic Business,” “2. Expansion of Overseas Business,”** and **“3. Promotion of Innovation,”** - to aim for **“Contribution to a Sustainable Society.”**

Regarding **“1. Profitability Improvement of Domestic Business,”** we positioned the rebuilding of our domestic business as a top priority. At a time when the overseas business faces a slowdown, albeit temporarily, it is not enough for the domestic business to simply secure cash flow through thorough cost reduction measures taken in the past. To generate cash flow more actively, we will take the efforts one step further. Concretely, we will (1) rebuild the manufacturing system in a fundamental way, (2) streamline the business by partnering with Mitsubishi Paper Mills and other companies, and (3) focus management resources on promising businesses whose demand is expected to stay firm. The recovery and improvement of the earnings capacity of the domestic business has become an urgent task.

With respect to **“2. Expansion of Overseas Business,”** there can be no doubt that it is overseas markets that are growing. Our policy is to target growth regions and growth fields in particular, and continue to expand our investment mainly in Asia and Oceania. More precisely, we seek organic business expansion from existing bases primarily in (1) the packaging business in Southeast Asia, India and Oceania, (2) the disposable diaper business in Southeast Asia and China, (3) the thermal paper business

worldwide, and (4) the pulp business worldwide. At the same time, we will pursue synergy not only within a business but also across different businesses and bases, to improve profitability.

With regard to **“3. Promotion of Innovation,”** we will further sharpen the technologies cultivated through the paper manufacturing business. This initiative is aimed at accelerating the development of innovative new materials and products that potentially support the sustained growth of the Oji Group and become a source of revenue in the next generation. In addition to (1) cellulose nano-fiber and (2) medical products made from wood hemicellulose, which we expect to have an enormous potential, we will accurately address the needs of the times and seek business opportunities in (3) biomass plastic, (4) paper alternatives to plastic, and (5) next-generation packaging solutions, areas that are drawing attention as countermeasures to environmental and other social issues.

During the three-year period of the plan, the Oji Group will offer society a variety of value through business operations based on the above three fundamental policies in management, thereby contributing to achieving the Sustainable Development Goals (SDGs). The Group will also lay the firm foundation for the businesses to become a corporate group that constantly earns annual consolidated operating profit of over 100 billion yen.



Anticipated opportunities and risks from the spread of COVID-19, and our social responsibility

In this way, the FY2019–2021 Medium-term Management Plan was launched. Over the past year, we have seen signs of transformation in the business environment that could be comparable to, or perhaps far greater than, the drastic changes that occurred in the wake of the global financial crisis in 2008. The global COVID-19 pandemic

has altered people's lifestyles. This transformation is not simply a temporary aberration, but is becoming the norm. This trend can be both a threat and an opportunity for us, and holds key to our future business operations. We will respond swiftly and appropriately to such changes.

The domestic business has witnessed a dramatic decline in demand for newsprint and printing and communications paper, due to changes in modes of consumption such as growth in stay-at-home demand and a sharp drop in inbound demand. The demand had been declining before the pandemic due to changes in communication methods, and in the context of so-called “new lifestyle,” we cannot expect the demand to recover. Meanwhile, the corrugated containers business, household paper business, and some other businesses is growing in importance, and they are forecast to remain strong into the future. For better or worse, the COVID-19 pandemic has highlighted the direction of “selection and concentration” that we should take. It goes without saying that we must respond more promptly and accurately than ever before.

In the overseas business as well, we cannot deny the possibility of experiencing unanticipated hardship amid increasing uncertainty over global situations. While expanding the business fields and geographical spread through the business restructuring, we have built up a structure that allows bases to complement one another to generate stable profits for the Oji Group as a whole. We now feel the necessity to devote even more energy to accelerating these efforts.

Many of the Oji Group's products find application in our daily life. We will continue to ensure stable supply of these products.

IV. Current Progress on Management Strategy, Future Outlook and Response

I would now like to review our performance in FY2019, the first year of the FY2019–2021 Medium-term Management Plan, and present an overview of the outlook for the second year, FY2020.

1st Year of the 3-Year Medium-term Management Plan

Review of FY2019

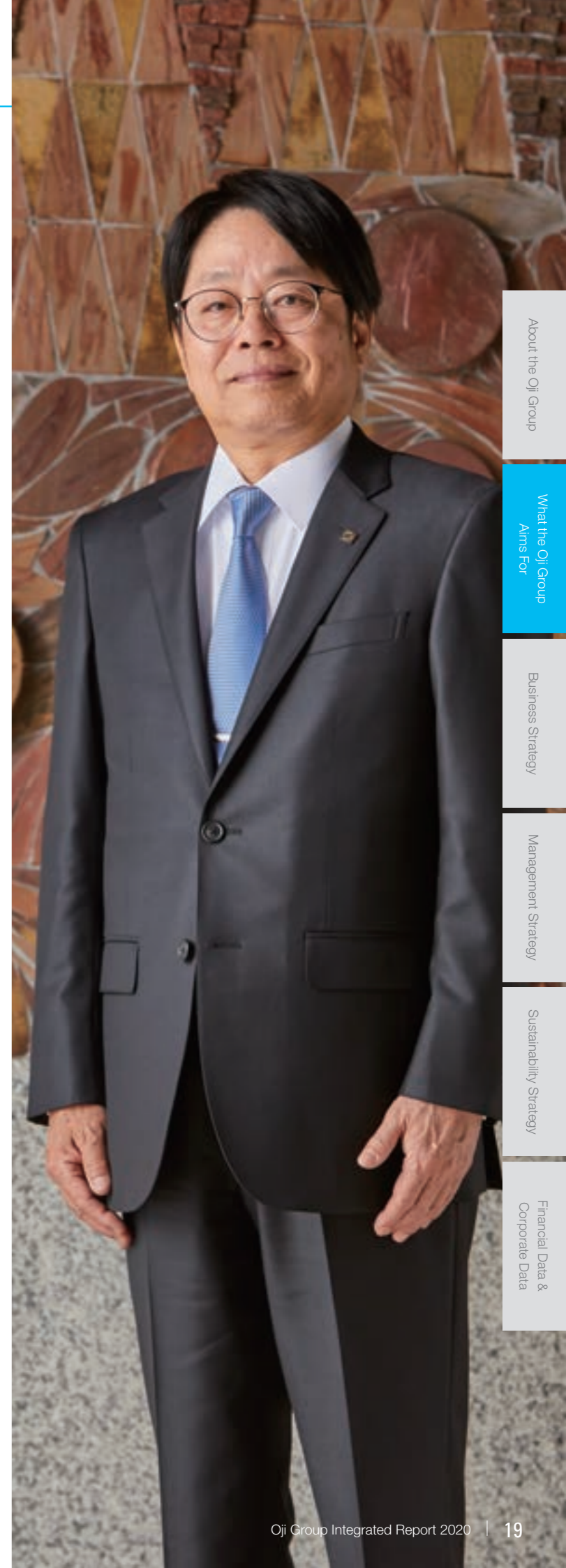
Consolidated net sales in FY2019 decreased 2.8% year-on-year to 1,507.6 billion yen. Operating profit decreased

3.7% year-on-year to 106.1 billion yen. The domestic business more than doubled its profit year-on-year, due to successful profit measures such as product price adjustments and cost reductions, but the overseas business suffered the weakening of the pulp market, which had been buoyant in the previous fiscal year. Ordinary profit declined 14.4% year-on-year to 101.3 billion yen. Profit attributable to owners of parent increased 11.9% year-on-year to 58.2 billion yen due to the recognition of a large-scale asset impairment in the previous fiscal year, hitting a record for a second consecutive year. The overseas sales ratio decreased 2.1 percentage points to 29.9%, ROE increased 0.8 percentage points to 8.5%, and the net D/E ratio decreased 0.1 points to 0.6 times.

2nd Year of the 3-Year Medium-term Management Plan

Outlook for FY2020

For FY2020, we anticipate net sales of 1,400 billion yen, down 7.1% year-on-year, and operating profit of 90 billion yen, down 15.2% year-on-year. Maintaining a stable consolidated operating profit of 100 billion yen is one of the targets of the medium-term management plan, and I deeply regret having to present this outlook, which falls below the target. The outlook is based on the assumption that the COVID-19 pandemic will cause net sales and operating profit to decrease by 67 billion yen (43 billion yen in Japan, 24 billion yen overseas) and 22 billion yen (13 billion yen in Japan, 9 billion yen overseas), respectively. In the domestic business, demand is expected to decline primarily for printing and communications paper, newsprint, specialty paper, and boxboard. In the overseas business, sales is forecast to fall due to the impact of temporary shutdowns mainly in China, Southeast Asia and New Zealand. With regard to other metrics, we forecast ordinary profit of 80 billion yen, a decrease of 21.0% year-on-year, and profit attributable to owners of parent of 50 billion yen, down 14.1% year-on-year. The overseas sales ratio and ROE are projected to drop 1.5 percentage points each to 28.4% and 7.0%, respectively. The net D/E ratio is predicted to remain unchanged at 0.6 times.



**Medium-term management plan:
Progress and future outlook of each
fundamental policy**

The above-mentioned impact of the COVID-19 crisis has manifested itself in the outlook for FY2020. Without the impact, operating profit for FY2020 would be higher year-on-year. This shows that our efforts are steadily producing results. We cannot leave ourselves at the mercy of outside events. The Oji Group will move forward step by step with initiatives in the management strategy, to make the best out of this situation.

The policy of **“1. Profitability Improvement of Domestic Business”** comprises (1) establishment of the optimal manufacturing system, (2) partnership with Mitsubishi Paper Mills, and (3) concentration of management resources on promising businesses. And there is more to come in each of these three initiatives. Regarding (1) establishment of the optimal manufacturing system, we have reached the stage of implementing specific plans formulated in FY2019. We will shut down, convert and transfer the manufacturing equipment at Oji Paper, Oji Materia and Oji F-Tex, with a view to strengthening cost competitiveness over the medium to long term and increasing cash flows. Under the initiative of (2) partnership with Mitsubishi Paper Mills, a joint venture of household paper and biomass power generation businesses commenced operation in FY2019. In July 2020, we completed the transfer of carbonless paper manufacturing and sale to Mitsubishi Paper Mills. We will continue to seek the ideal form of a comprehensive partnership in pursuit of mutual interests of both parties to maximize the synergy. The initiative of (3) concentration of management resources on promising businesses, has already presented tangible progress: a new corrugated container plant in Funabashi City, Chiba Prefecture, one of the largest in Japan, and a new household paper (toilet roll) converter at the Edogawa Mill, Tokyo, were put into operation in FY2020. Both facilities have reinforced the supply system that covers the Kanto region, a major consumption area. We will continue to grow our businesses including the packaging business, household paper business, and renewable energy business.

“2. Expansion of Overseas Business” is also progressing apace. Regarding (1) the packaging business in Southeast Asia, India and Oceania, a new containerboard facility in Malaysia will come on line in 2021. In addition to strengthening the manufacturing of cost competitive base paper, we are building corrugated container converting

base one after another in each country. FY2019 saw the commencement of operation at the fifth facility in Vietnam, the third in Cambodia, and the fourth in India. In FY2020, our first facility in Indonesia will begin operation. In FY2021, our fourth facility in New Zealand is set to relocate and start running with state-of-the-art machines. We will seek to steadily capture the growing demand for corrugated containers, and increase our market share. Regarding (2) the disposable diaper business in Southeast Asia and China, a proprietary plant in Indonesia went into operation in FY2019. In FY2020 we will endeavor to expand production by adding converters and integrating manufacturing bases in Malaysia. In China, we have been strengthening e-commerce sales of “Made in Japan” products. In (3) the thermal paper business, the Oji Group has decided to expand and reinforce its facilities in Brazil to double the production capacity, in response to vigorous demand seen in South America. While maintaining the 85% market share in Brazil, we aim to expand our share in Latin America as a whole. Furthermore, we will develop the thermal paper business globally in the U.S., Germany, Thailand and Japan. For (4) the pulp business, we are striving to build a business foundation to keep securing stable profits, even as the business environment becomes increasingly harsh. We are working on profitability improvement. Such efforts include active investment in Brazil to update the manufacturing facilities, and in New Zealand to convert production varieties.

“3. Promotion of Innovation” is progressing as follows: we are advancing initiatives on (1) cellulose nano-fiber by leveraging our proprietary technologies to develop the use of the material and commercialize it, in collaboration with over 100 clients in and outside Japan. For example, cellulose nano-fiber has already found use in cosmetics and table tennis rackets. We aim to expand its utilization in materials for construction and civil engineering. Going forward, the Oji Group will continue to explore new applications. We will also further accelerate the development of (2) medical products made from wood hemicellulose, (3) biomass plastic, (4) paper alternatives to plastic, and (5) next-generation packaging solutions.

V. Fulfilling the “Contribution to a Sustainable Society”

So far, I have discussed the Oji Group’s DNA, management philosophy, slogan, and management strategy. Collectively, these are a roadmap for enhancing corporate value and contributing to building a sustainable society. On the other hand, we must not forget the Oji Group’s



“safety, environment and compliance” and “human resources” initiatives, which form the basis for all of the efforts mentioned above.

The “safety, environment and compliance” is the cornerstone for corporate survival, as one small misstep in this realm could ruin the relationship of trust with society that the Oji Group has built up until now. With regard to “safety,” we are working to raise employees’ awareness that their safety, health and happiness are a prerequisite for maintaining the Group’s manufacturing activities. I have always kept in mind the mission of ensuring that “employees who come to work healthy in the morning go back home healthy at the end of the day,” and inculcated the importance of proactively undertaking safety activities and protecting precious lives. In terms of the “environment,” we continue focusing our energy on maintaining zero environmental incidents and zero product liability incidents. At the same time, we will protect and make good use of the Oji Forests in Japan and overseas, thereby offering solutions to environmental problems that draw global attention. The Oji Group’s definition of “compliance” goes beyond the narrow sense of conformity with laws and regulations; the term also encompasses social norms, corporate ethics, and other general rules in society to abide by. Based on this idea, we are encouraging all officers and employees to be fully aware of “sound common sense,” “sensitivity to immorality” and “courage to take action” and engage in business activities that cater to stakeholders’ trust. Positioning the “safety, environment and compliance”

as the most critical matter that prevails over all of our businesses, we will work on this matter attentively.

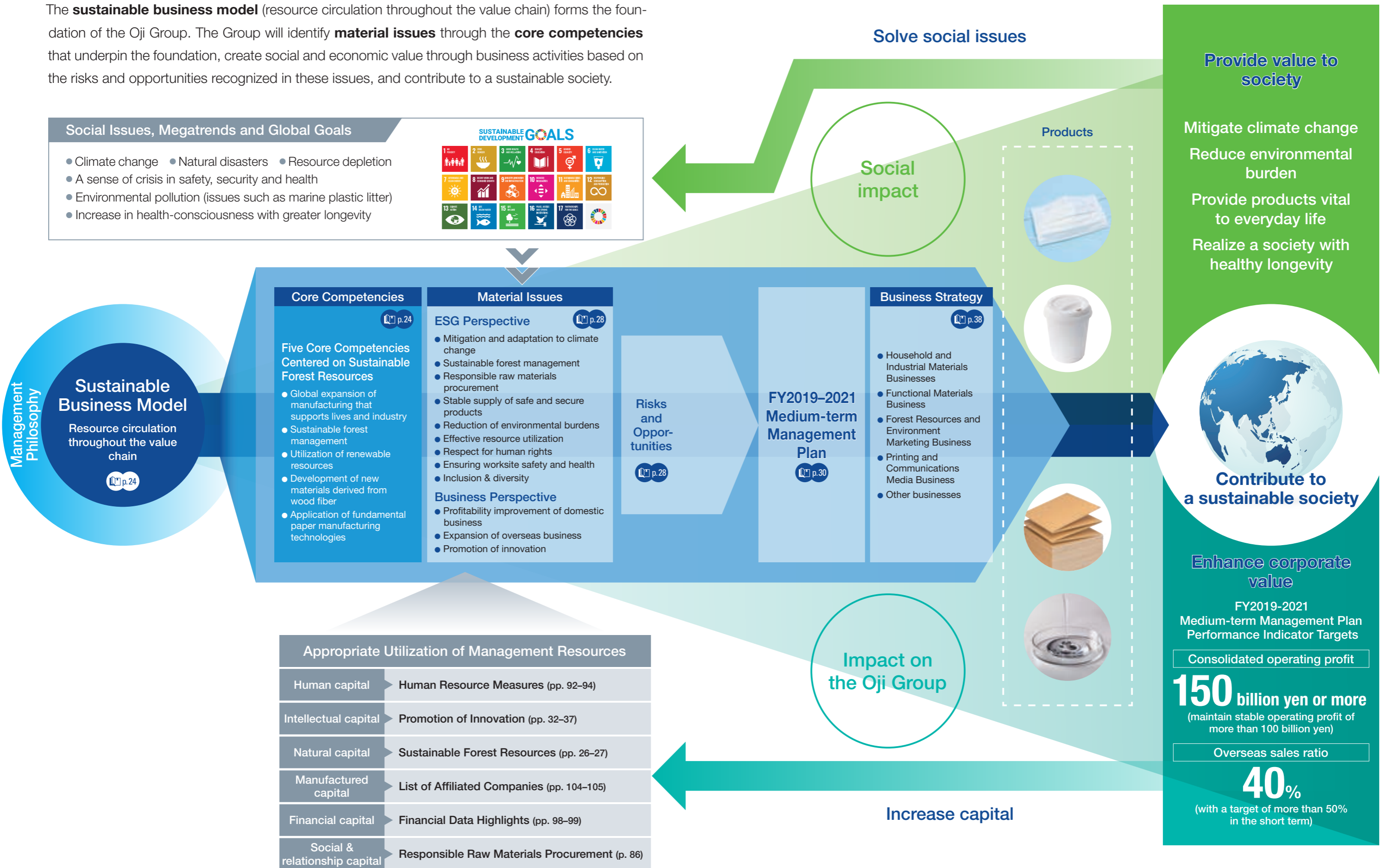
A company is its people, as the saying goes. At the Oji Group, it is not only a company itself but people within it, or its employees, that produce changes and execute the management strategies. Our business is premised on employees’ insight into social changes, willpower and flexibility to embrace change, diversity and creativity to generate outside-the-box ideas, expertise needed to execute strategy and capability to play an active role globally. Human resources are the most indispensable factor in corporate management. We need to help the employees hone their abilities, and foster a culture that enables them to demonstrate their potential to the fullest. To this end, the Oji Group will focus on human resources initiatives including human resources development, working style reforms and promotion of diversity.

VI. Building Relationships with Stakeholders

Last but not least, I would like to send a message to all our stakeholders.

Oji Holdings intends to develop into a truly global enterprise, so as to continue co-existing with society and pioneering a future of the society. To do so, we will constantly take the challenges of transformation. We will make every effort to meet your needs and expectations. I look forward to your continued understanding and support.

The **sustainable business model** (resource circulation throughout the value chain) forms the foundation of the Oji Group. The Group will identify **material issues** through the **core competencies** that underpin the foundation, create social and economic value through business activities based on the risks and opportunities recognized in these issues, and contribute to a sustainable society.



Sustainable business model “Resource circulation throughout the value chain”

The Oji Group is working to ensure that its businesses contribute to a sustainable society, through the global expansion of its sustainable business model: “resource circulation throughout the value chain.” This sustainable business model is supported by five core competencies centered on sustainable forest resources.



Core Competencies Five core competencies centered on sustainable forest resources

1	Global Expansion of Manufacturing that Supports Lives and Industry	Global expansion of the packaging business, primarily corrugated containers, the household paper business, the disposable diaper business, the thermal paper business, and the pulp business
2	Sustainable Forest Management	Practicing environmentally, economically and socially friendly sustainable forest management, through maintaining and managing 190,000 hectares of company-owned forests, the largest private holding in Japan, and developing the forest plantation business that handles 250,000 hectares of forest plantations in six countries overseas
3	Utilization of Renewable Resources	Paper recycling, which accounts for around 60 percent of paper-making raw materials; water recycling by reusing water taken in through the pulp, paper and paperboard manufacturing processes
4	Development of New Materials Derived from Wood Fiber	Cellulose nano-fiber (CNF), cellulose-derived biomass plastic, medical products made from wood hemicellulose
5	Application of Fundamental Paper Manufacturing Technologies	Developing the biomass power generation business and the broader renewable energy business; the water treatment business such as industrial water production and industrial wastewater treatment

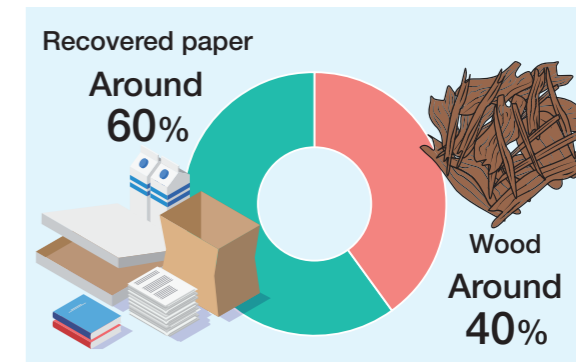
A Sustainable Business Model that Creates and Circulates Resources

Approximately 60 percent of the raw material used in paper is recovered paper, and the remaining 40 percent comes from woods. Both recovered paper and trees are renewable resources, coming from forest resources.

We use resources carefully, and ensure thorough resource circulation throughout the value chain so that our business development itself will contribute to building a sustainable society.

Specifically, we are engaged in three forms of recycling: “forest recycling” in which we practice sustainable forest management through growing, harvesting and planting trees; “water recycling” in which we reduce water consumption by circulating and reusing water in manufacturing processes and purify wastewater; and “paper recycling” in which we collect and recycle paper products.

We are also actively promoting the biomass power generation business and developing cellulose nano-fiber (CNF), biomass plastic and other new materials derived from wood fiber, so as to expand the sustainable business model.



Sustainable Forest Management

The Oji Group has valued the sustainability of forest resources since the 1910s. We positioned forest resources at the core of our sustainable business model and has put sustainable forest management into practice (pp. 24–25). We now own and manage forest plantations not only in Japan but also in nine regions of six countries outside Japan. Such forest plantations total 570,000 hectares. The portfolio comprises about 440,000 hectares of production forests primarily for producing forest products in consideration of environmental conservation, and about 130,000 hectares of conservation forests principally for preserving biodiversity and basins. In addition, we use the forest certification program to implement appropriate forest management in consideration of the environment, society and economy. The forest certification acquisition rates in FY2019 were 94% for overseas forest plantations and 100% for company-owned forests in Japan (pp. 72–73).

*In pursuit of sustainable forest management, a third-party organization certifies forests after examining whether they are managed in good condition according to the standard. The certification covers all types of forest, including production forests and environmentally protected forests. e.g.: FSC™ (FSC™C016623, etc.) and PEFC, etc.

Oji Forests **570,000** ha
 Production forests **440,000** ha
 Conservation forests **130,000** ha

Initiatives for Sustainable Forest Management

Country	Company	Established	Production forests (1,000 ha)	Conservation forests (1,000 ha)	Total (1,000 ha)
Brazil	CENIBRA	1973	146	123	269
New Zealand	Pan Pac	1971	35	0	35
	SPFL	1992	9	0	9
Indonesia	KTH	1998	37	6	43
Vietnam	QPFL	1995	9	0	9
Other (4 companies in Vietnam, Australia and China)	—	—	17	0	17
Overseas subtotal			253	129	382
Company-owned forests in Japan	—	1945	188	0	188
Group total			441	129	570



CENIBRA in Brazil: Production forest (left) and conservation forest (right)

Production forests: forests primarily for producing forest products in consideration of environmental conservation.
 Conservation forests: forests primarily for environmental conservation, including protecting biodiversity and basins.

Initiatives in Japan and Overseas

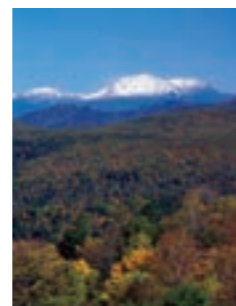
Company-owned Forests in Japan

The Group owns forests in approximately 650 locations throughout Japan, from Hokkaido to Kyushu. We plant fir, larch and Ezo spruce, among other species, in Hokkaido, and grows Japanese cedar and cypress in Honshu and southward. It takes over 60 years to harvest these trees. The harvested trees are processed into lumber and the residuals are used as raw materials for paper and wood-based fuel.

The Oji Group establishes collaborative relationships between people engaged in company forest management and users of lumber in each geographical region, and provides lumber, plywood, raw materials for paper, wood-based fuels, and other wood products to companies both inside and outside the Group. In this and other ways, we strives to revitalize Japan's forestry industry and ensure a stable supply of domestic lumber.

Overseas Forest Plantations

The forest plantation business spans nine regions in six countries, which vary in climate and natural condition. For example, we grow hardwoods such as eucalyptus and acacia (harvestable in around 10 years), and softwoods such as radiata pine (harvestable in around 30 years), depending on the region. Hardwood is mainly used for pulp. Thinned softwood is used for pulp, while harvested softwood is used for lumber products. In raising seedlings, planting, silviculture, harvesting and other operations, staff members from the Group's business companies are joined by numerous local veterans, including subcontractors, who support sustainable forest management.



Biei company-owned forest, Hokkaido



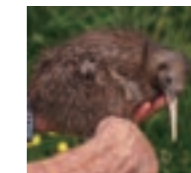
Pan Pac's Kaweka company-owned forest, New Zealand

Contribution to the Local Environment, Economy, and Society

Sustainable forest management requires a mutual understanding between forest plantation business operators and the local community. Also indispensable is their sharing of environmental, economic, and social benefits. To give an example of economic benefits, our overseas forest plantation companies have created over 15,000 jobs locally. Another such example is our technical training on planting and forest management provided to owners of small-scale forests (the area of forest plantations possessed by the owners is approximately 27,000 hectares at present). Further, the forest plantation business companies cooperate with local governments, NGOs, and civic groups in each region to create and share environmental and social benefits. Their activities include biodiversity conservation programs in environmentally protected forests, vocational and educational support in local communities, and medical assistance in areas that have poor access to medical services.



CENIBRA: Beekeeping activities and honey produced in the forest



Pan Pac: A brown kiwi chick



QPFL: Medical assistance

Contribution to Addressing Climate Change

The world is facing a plethora of problems attributable to climate change, such as extreme heat, heat waves, localized torrential rains, flooding, and subsequent reduction in agricultural production. These problems are also deeply connected with the reduction of forested area and forest degradation. Forests absorb and fix CO₂ in the atmosphere. The Oji Group therefore believes that sustainable forest management is an effective means of tackling climate change.

As a result of sustainable forest management by the Oji Group, the CO₂ fixation amount at the end of FY2019 was 135 million tons, comprising 121 million tons in 440,000 hectares of production forests, and 14 million tons in 130,000 hectares of conservation forests. The annual amount of CO₂ absorbed due to tree growth in FY2019 totaled 12 million tons.

The Oji Group will continue to increase CO₂ absorption and fixation amounts, while maintaining and utilizing sustainable forest resources, to help address climate change issues.

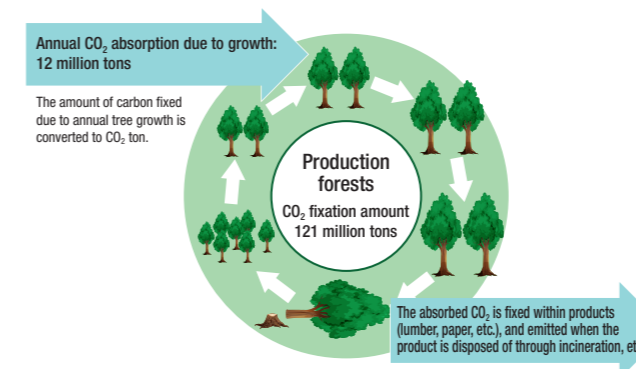
Production forests CO₂ fixation amount

121 million tons (FY2019)

Equivalent to the annual CO₂ emissions of around

13 million people in Japan

Calculated on the basis of annual total per capita emissions (total emissions volume from industry, transport and households) in Japan of 8.9t.



Pan Pac's forest plantation, New Zealand



Rubeshibe company-owned forest in Hokkaido

The Oji Group has identified material issues that have significant impacts on our sustainable business model, clarified risks and opportunities from the perspectives of business and ESG, and developed measures for response and value creation.



Process for identifying material issues



Material issues analysis map



Risks and Opportunities from ESG Perspective

Material Issues (ESG) and KPI pp. 72-73

Material Issues	Associated Risks and Opportunities ▲ Risk ○ Opportunity	Main Countermeasures against Major Risks
Mitigation and adaptation to climate change	<ul style="list-style-type: none"> ▲ Greater natural disasters caused by abnormal weather ▲ An increase in costs due to strengthening and introduction of carbon tax, introduction of an emissions trading system, etc. ▲ Impact on sales from changing in evaluation of corporate attitudes and values of the market ○ An increase in demand for low-carbon products ○ An increase in value of company-owned forests through trading carbon credits associated with the carbon absorbed by the forests 	<ul style="list-style-type: none"> ● Reduce GHG emissions intensity through improving production efficiency, saving energy, and utilizing renewable fuel and waste fuel ● Expanded use of non-fossil fuels and biomass fuels as alternatives to coal ● Sustainable forest management such as promotion of forest plantation and conservation of company-owned forests ● Maintain and expand the multi-functionality of forests ● Absorb and fix CO₂ through sustainable forest management ● Develop biomass power generation business ● Develop eco-friendly products ● Opportunities arising from introduction of carbon pricing (especially emissions trading)
Sustainable forest management		
Responsible raw materials procurement	<ul style="list-style-type: none"> ▲ Occurrence of cases lacking consideration for the environment and society in the supply chain ○ An increase in demand for eco-friendly products owing to changes in consumer awareness 	<ul style="list-style-type: none"> ● Expand CSR procurement, taking into consideration the environment and society in accordance with the Oji Group Partnership Procurement Policy and Wood Raw Material Procurement Guidelines ● Central management for appropriate procurement of major raw materials ● Manage the supply chain thoroughly (appropriate procurement through supplier monitoring, risk assessment, securing various suppliers, etc.) ● Supply of FSC™ certified products (FSC™ C014119, etc.)
Stable supply of safe and secure products	<ul style="list-style-type: none"> ▲ A decline in trust of stakeholders due to spread of negative rumors ○ Contribution to society through stable supply of safe and secure corrugated containers, household paper, and hygiene products, and resulting increase in corporate value 	<ul style="list-style-type: none"> ● Stably supply own products ● Ensure safe quality design and management in compliance with relevant laws and regulations and stricter voluntary management standards ● Provide customers with information on safety of raw materials (chemicals, materials) ● Supply of hygiene products such as masks and gowns to prevent the spread of infectious diseases such as COVID-19
Reduction of environmental burdens	<ul style="list-style-type: none"> ▲ Adverse effects on society due to pollution and the resulting decline in trust of stakeholders ○ An increase in demand for eco-friendly products owing to changes in consumer awareness 	<ul style="list-style-type: none"> ● Set voluntary management standards that are stricter than the environmental regulatory standards ● Purify wastewater and save emissions of chemical substances in exhaust ● Reduce and effectively use waste ● Develop eco-friendly products and biodegradable materials
Effective resource utilization	<ul style="list-style-type: none"> ▲ Impact of resource depletion on core businesses ○ Deployment of water treatment technology 	<ul style="list-style-type: none"> ● Forest recycling (Sustainable forest management) ● Paper recycling (improve the recovered paper utilization ratio) ● Reduce water intake and improve water recycling ● Expand the water treatment business overseas
Respect for human rights	<ul style="list-style-type: none"> ▲ A decline in trust of stakeholders due to lack of consideration for human rights 	<ul style="list-style-type: none"> ● Formulate and implement the "Oji Group Corporate Code of Conduct," the "Oji Group Behavior Standard," and the "Oji Group Human Rights Policy" ● Perform internal audits ● Implement the whistleblowing system ● Raise awareness of compliance and human rights through in-house training ● Assess risks associated with suppliers' respect for human rights
Ensuring worksite safety and health	<ul style="list-style-type: none"> ▲ Occupational accidents ▲ Health of employees hindered by the spread of infectious diseases ○ An increase in trust of employees and other stakeholders resulting from prompt response to disasters and infectious diseases 	<ul style="list-style-type: none"> ● Establish safety and health management structures and promote activities aimed for safety and health ● Thoroughly ensure safety in the handling of machines and equipment and in other operations ● Promote safety education (Introduce VR risk experience education, etc.) ● Promote physical and mental well-being of employees ● Create comfortable work environments ● Respond to infectious diseases including COVID-19
Inclusion & diversity	<ul style="list-style-type: none"> ○ Securing outstanding human resources ○ Creation of innovative value ○ Contribution to globalization 	<ul style="list-style-type: none"> ● Implement human resource strategies and develop human resources ● Promote working style reforms ● Promote diversity

Risks from Business Perspective

Securities Reports: <https://www.ojiholdings.co.jp/ir/library/security.html> (available only in Japanese)

Material Issues	Major Risks	Main Countermeasures against Major Risks	
Profitability improvement of domestic business	Risks associated with climate change	<ul style="list-style-type: none"> ● See "Mitigation of and adaptation to climate change" in the ESG Perspective section p.29 	
	Risks associated with pandemic	<ul style="list-style-type: none"> ● The Group Emergency Headquarters to confirm the safety of employees, grasp damage situation, and take measures to continue supplying products to our customers ● Review continuously of the BCP, promote digital transformation, etc. to minimize the impact on business activities ● Establish the Group Emergency Headquarters and the Group Disaster Control Office in the event of a disaster ● Minimize the impact on business activities ● Maintain a certain level of liquidity on hand by accumulating cash and deposits in addition to commitment line contracts with our banks 	
	Structural changes arising from development of innovation	<ul style="list-style-type: none"> ● Secure cash flows by restructuring the production system of shrinking businesses, making efficient capital investment, etc. ● Expand the portfolio by investing in growth fields in Japan and overseas and allocating resources to development of new material product ● Take measures for working style reforms and diversity promotion 	
	Risks arising from fluctuations in demand	<ul style="list-style-type: none"> ● Reinforce the business foundation and secure cost competitiveness through cost reduction and development of new businesses and new products (Strengthen product development capabilities through integrated management of materials and processing, develop new products such as paper alternatives to plastic containers, functional paper with new properties, etc.) 	
	Risks associated with changes in international market conditions	<ul style="list-style-type: none"> ● A dedicated department responsible for Group-wide procurement strategies ● Stabilize procurement through stronger relationships with suppliers ● Stabilize procurement of recovered paper through maintaining the paper recycling system and strengthening relationships with related companies 	
	Expansion of overseas business	Risks associated with overseas business	<ul style="list-style-type: none"> ● Gather information on political, economic, and social conditions of neighboring countries by our regional headquarters ● Expand business to a wide variety of countries to diversify risks ● Develop our business using joint ventures with leading local companies to improve our information gathering ability, save our investment amount, and lower risks ● Mitigate financial risks by utilizing group financing and derivatives
		Risks of disasters, etc.	<ul style="list-style-type: none"> ● Formulate a BCP and continuously review it ● Establish the Group Emergency Headquarters and the Group Disaster Control Office in the event of a disaster ● Set voluntary management standards that are stricter than the environmental regulatory standards ● Establish safety and health management structures
	Promotion of innovation	Risks associated with laws and regulations, etc.	<ul style="list-style-type: none"> ● Thoroughly disseminate the "Oji Group Corporate Code of Conduct" and the "Oji Group Behavior Standard" at domestic and overseas sites
		Risks associated with lawsuits, etc.	<ul style="list-style-type: none"> ● Prevent disputes through discussion with business partners and clarification of contract details ● Build a system to respond to lawsuits in collaboration with law firms
		Risks associated with product liabilities	<ul style="list-style-type: none"> ● Ensure quality design and manufacturing in compliance with relevant laws and regulations and stricter voluntary management standards ● A Group-wide management department to support product safety management and perform audits
Risks arising from exchange rate fluctuations		<ul style="list-style-type: none"> ● Monitor the impact of exchange rate fluctuations on the Group's business performance and hedge a certain amount of risk by utilizing derivatives and mutually lending and borrowing foreign currency-denominated receivables and payables among group companies in Japan 	
Risks associated with information leaks		<ul style="list-style-type: none"> ● Establish a risk management implementation system and clarify its roles (formulate and implement rules for Group information system use and risk management, create compliance rules for information system users, take preventive measures against unauthorized access, data theft, email spoofing, etc.) 	

FY2019–2021 Medium-term Management Plan

In order to continuously increase corporate value in the ever-changing world, the Oji Group has formulated and is implementing a strategic medium-term management plan that promotes business restructuring through transformation based on its Management Philosophy and sustainable business model.

Review of the Strategies

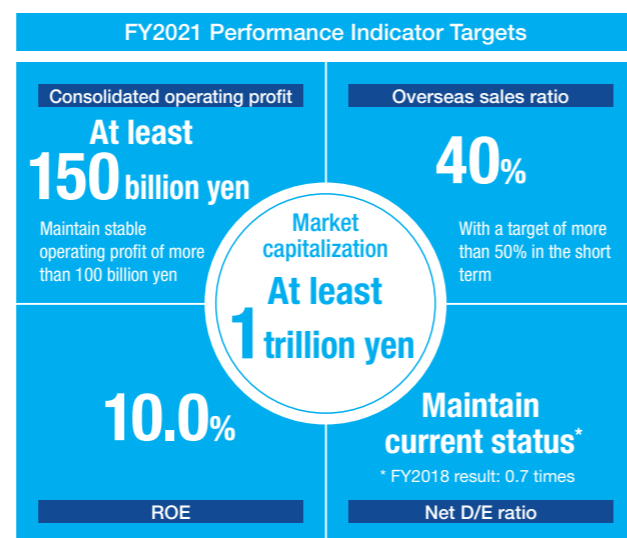
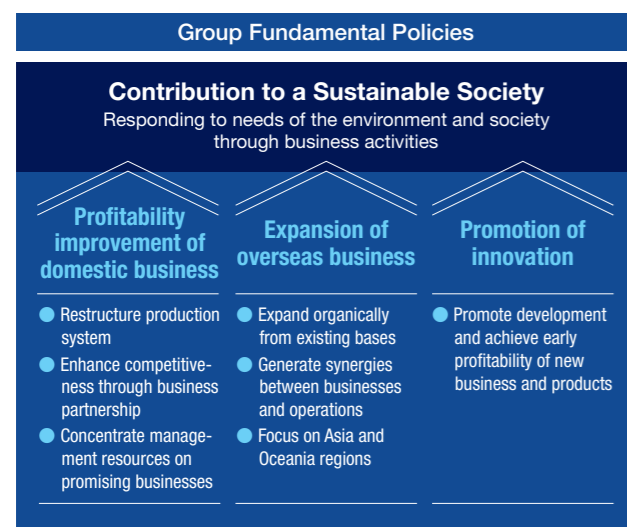


Major Indicators

	FY2015 and earlier		FY2016–2018		FY2019–2021	
	Targets	Final fiscal year results	Targets	Final fiscal year results	Targets	FY2019 results
Consolidated operating profit	¥90.0 billion	¥72.0 billion	¥100.0 billion	¥110.2 billion	Over ¥150.0 billion	¥106.1 billion
Overseas sales ratio	26.0%	27.8%	35.0%	32.0%	40.0%	29.9%
ROE	7.0%	2.1%	8.0%	7.7%	10.0%	8.5%

Overview of the FY2019–2021 Medium-term Management Plan

Under the FY2019–2021 Medium-term Management Plan, the Oji Group aims to constantly earn over 100 billion yen in annual consolidated operating profit through “contribution to a sustainable society,” with “profitability improvement of domestic business,” “expansion of overseas business” and “promotion of innovation” positioned as the fundamental policies.



FY2019 Results and FY2020 Priority Measures

Industrial Materials Business Household and Consumer Products Business Functional Materials Business Forest Resources and Environment Marketing Business Printing and Communications Media Business R&D and others

Profitability improvement of domestic business

- FY2019 Major Results**
- Apr. 2019 Start of JV household paper business with MPM*
 - Sep. 2019 Start of JV biomass power generation with MPM*
 - Dec. 2019 Start of sales of OJI FLEX PACK'AGE, a next-generation packaging solution, and Rakudan, its packaging material
 - Feb. 2020 Shutdown of the #9 machine at the Oji Paper Tomioka Mill
- *MPM: Mitsubishi Paper Mills

- FY2020 Main Priority Measures** *Scheduled dates for future events
- Jul. 2020 Start of a new corrugated container plant (Funabashi City, Chiba Prefecture)
 - Jul. 2020 Transfer of carbonless paper manufacturing and sale to MPM*
 - Sep. 2020 Start of paper liquid containers business with ISHIZUKA GLASS
 - First half of FY2020 Shutdown of the #N-1 and #N-5 machines at the Oji Paper Tomakomai Mill *The #N-5 machine is scheduled to resume operation as a containerboard machine
 - First half of FY2020 Shutdown of the #1 and #4 machines at the Oji F-Text Ebetsu Mill
 - Oct. 2020 Start of a new household paper processing machine (Edogawa Mill)

Pick Up p.49
Start of our third biomass power generation facility, aiming to contribute to the prevention of global warming

Pick Up p.38
Redevelopment of an existing logistics center to create one of the largest corrugated container plants in Japan in a major consumption area

Expansion of overseas business

- FY2019 Major Results**
- Jun. 2019 Myanmar: Introduction of water production equipment to the largest brewery
 - Jul. 2019– SE Asia and India: Start of a new corrugated container plant [Jul. 2019: Vietnam, Feb. 2020: Cambodia, Mar. 2020: India]
 - Nov. 2019 Brazil: Profitability enhancement of the pulp business
 - Jan. 2020 Indonesia: Start of a new disposable diaper plant

- FY2020 Main Priority Measures** *Scheduled dates for future events
- Oct. 2020 China: Start of a new filter plant
 - 2020 Indonesia: Start of a new corrugated container plant
 - Feb. 2021 Myanmar: Introduction of domestic water treatment and wastewater treatment equipment to a large-scale multipurpose facility
 - Feb. 2021 Brazil: Reinforcement of a thermal paper machine *Machine expansion is also scheduled in the same year.
 - Mar. 2021 Malaysia: Machine expansion and site integration of disposable diaper business

Pick Up p.42
Indonesia: Start of our own disposable diaper plant to increase cost competitiveness through in-house production

Pick Up p.46
Brazil: Capacity enhancement (and machine expansion in the same year) of our thermal paper business to maintain and increase market shares in Brazil and Latin America

Coming Soon p.39
[First half of 2021] Malaysia: Start of a new containerboard machine to promote reinforcement of the business through integrating material and converting

Promotion of innovation

- FY2019 Major Results**
- Apr. 2019 Commercialization of CNF AUROVISO CS as a cosmetic ingredient
 - Apr. 2019 Adoption of hydrolyzed xylan by ROHTO Pharmaceutical for their cosmetics
 - Apr. 2019 Start of provision of SILBIO BARRIER, a paper material with barrier properties
 - Jun. 2019 Myanmar: Introduction of water production equipment to the largest brewery
 - Aug. 2019 Development of KAMIWAZA, a paper-based temporary construction material used in civil engineering
 - Sept. 2019 Adoption of our products by Nestlé (Thailand) for packaging materials for their products
 - Oct. 2019 Adoption of our biomass plastic business by the Ministry of the Environment as the commissioned project
 - Oct. 2019 Provision of technology of CNF* reinforced polycarbonate resin (automobile window application)
 - Dec. 2019 Start of sales of OJI FLEX PACK'AGE and Rakudan
 - Jan. 2020 Adoption of our products by Nestlé (Japan) for packaging materials for their products
 - Feb. 2020 Adoption of CNF* AUROVEIL for materials for table tennis rackets
- *CNF: Cellulose nano-fiber

- FY2020 Main Priority Measures** *Scheduled dates for future events
- Apr. 2020 Establishment of Oji Pharma Co., Ltd.
 - Aug. 2020 Development of a product with high-grade transparency of SILBIO BARRIER, a paper material with barrier properties
 - Aug. 2020 Start of provision of PaPiPress, a molded pulp product
 - Feb. 2021 Myanmar: Introduction of domestic water treatment and wastewater treatment equipment to a large-scale multipurpose facility

Pick Up 2019 p.34
Provision of technology of CNF reinforced polycarbonate resin (automobile window application) at Tokyo Motor Show 2019

Pick Up 2020 p.36
Establishment of Oji Pharma Co., Ltd. to reinforce collaboration with universities and pharmaceutical companies

Value Creation by the Innovation Promotion Division

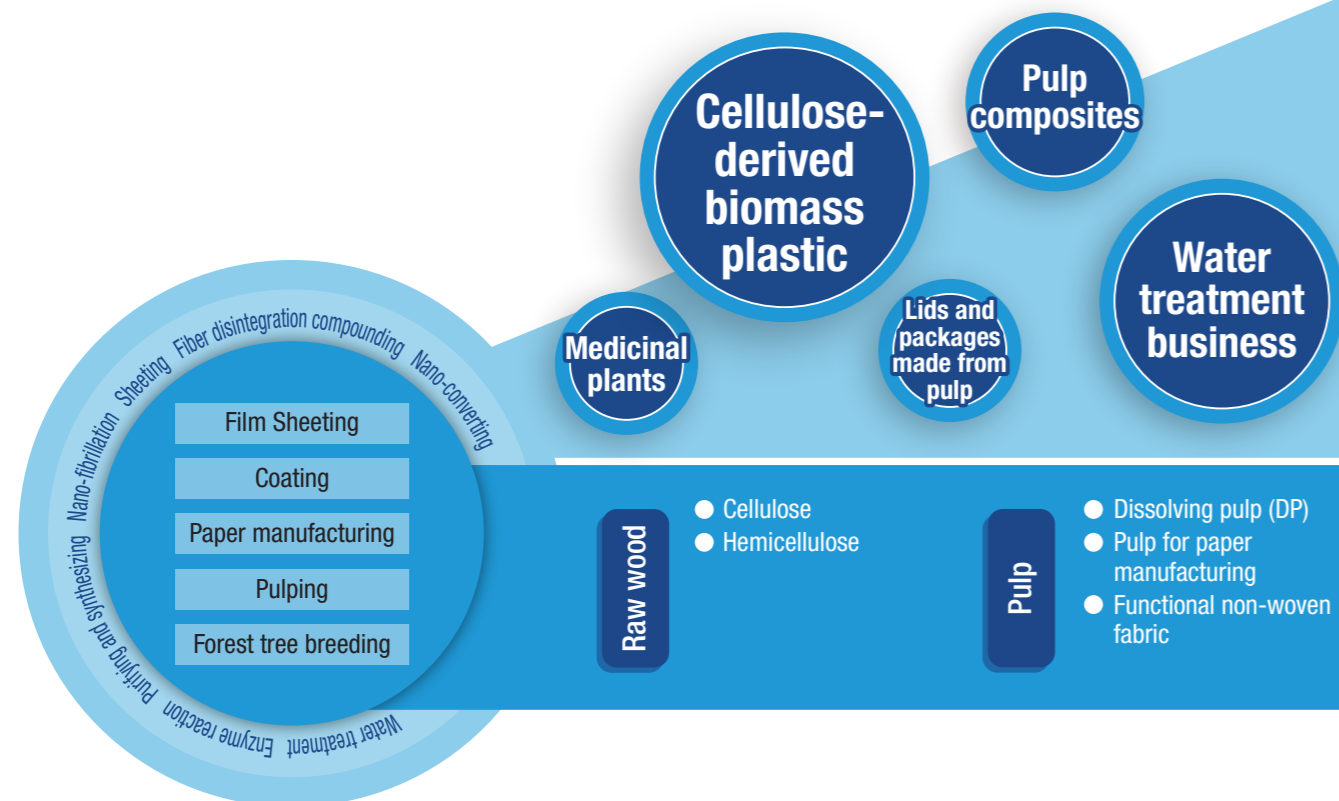
The Innovation Promotion Division brings together multiple cutting-edge technologies based on the knowledge gained from paper manufacturing and forestry, which are the roots of our founding, to create innovative value.

We will serve as a business incubator who continually develops new projects into new business, aim for contribution to a sustainable society in response to the social issues people face, and propose new products and businesses that excite everyone.

Major Efforts toward New Products and Business

Contribution to a sustainable society through diverse core technologies and multiple cutting-edge technologies

1 Development of eco-friendly materials and products	Striving to solve social issues including marine plastic litter and climate change.
2 Active efforts in the healthcare field	Utilizing our knowledge and know-how for future medical care.
3 Total solution	Aiming for contribution to industrial development by uncovering needs and seeds.



We Accelerate “Promotion of Innovation.”

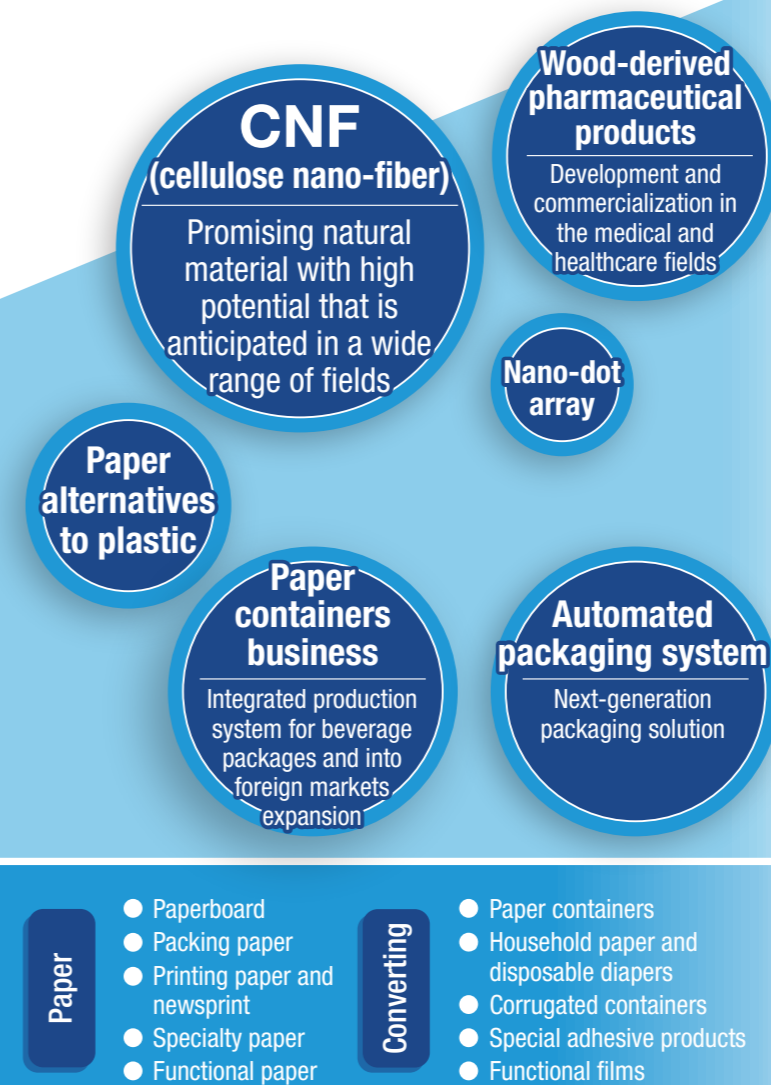
The Innovation Promotion Division is responsible for one of the three pillars of the medium-term management plan, “Promotion of Innovation.” Accordingly, the division is tasked with the development of truly unique new materials and the supply chain reform. Based on our technologies accumulated in the conventional pulp and paper business, we are taking on the challenge of developing new materials in addition to technological innovations in such fields as cellulose nano-fiber (CNF), wood-derived pharmaceutical products, cellulose-derived biomass plastic, and paper alternatives to plastic. Furthermore, the paper containers business, next-generation packaging solutions, and water treatment business create new supply chains that transcend our conventional business fields, providing products and services in tune with the needs of the times. I hope you will wait and see our progress with high expectations.

Through these efforts, we hope to be the vanguard of profitability improvement of the domestic business and expansion of the overseas business.



Masaru Yokoyama
Senior Executive Officer
General Manager, Innovation
Promotion Division
Oji Holdings Corporation

Development vision to 2030



2030
Contribution to a Sustainable Society

Consider people
Active efforts in the healthcare field
Development of eco-friendly materials and products
Total solution

Consider the Earth

SUSTAINABLE DEVELOPMENT GOALS

- 2 ZERO HUNGER
- 3 GOOD HEALTH AND WELL-BEING
- 6 CLEAN WATER AND SANITATION
- 12 RESPONSIBLE CONSUMPTION AND PRODUCTION
- 13 CLIMATE ACTION
- 14 LIFE BELOW WATER
- 15 LIFE ON LAND

Development of Eco-friendly Materials and Products

Cellulose Nano-fiber (CNF)

Cellulose nano-fiber (CNF) is a plant fiber (pulp) that is finely fibrillated to the nano-order level. CNF is lightweight and durable and offers excellent thermal non-deformability; it also features exceptional viscosity and thixotropy. This new natural material with high potential is expected to find application in a broad range of fields.

The Oji Group's proprietary phosphorylated CNF can impart new functionalities to a variety of products. The phosphorylated CNF is provided to over 100 companies in a wide range of fields in Japan and overseas to jointly develop and commercialize new products.

*Thixotropy: A property of being highly viscous under static conditions but becoming thin when stirred or otherwise stressed.



1. Functional Additive Applications

The Oji Group's CNF adds various new functionalities to raw materials.

● CNF for Use in Cosmetic Ingredients

Working with Nikko Chemicals Co., Ltd., a leader in the cosmetics materials industry, the Oji Group commercialized AUROVISCO CS, a cosmetic ingredient. Its new functionality has been well received as it presents viscosity higher than any other naturally-derived thickeners and maintains a non-sticky and moist feel.

It won the silver award at one of the largest exhibitions for cosmetic ingredients in the world. The product development is underway at the world's leading cosmetic manufacturers.



Cosmetics products (sample)

● CNF Used as Concrete Pump Primer

RUBURI, a concrete pump primer made by TAKEcite Co., Ltd., uses CNF AUROVISCO as an ingredient. In the process of pumping concrete, approximately 1 ton of mortar is typically used to prevent pipes from clogging. After use, the mortar is disposed of as industrial waste. That amount of mortar can be replaced by only a few tens of kilograms of RUBURI, which contains AUROVISCO. The replacement helps reduce a large amount of industrial waste as well as time required for work.

Its standardization is currently underway, and once standardized, the product is expected to be adopted at more construction sites.

2. Composite Applications

By creating compounds of existing materials and CNF, we promote development of new composites that take advantage of their respective strengths.

● CNF Reinforced Polycarbonate Resin (automobile window application)

Polycarbonate resin is lightweight, highly transparent, and shock resistant, and is expected to be used as an alternative to glass for automobile windows, but it also has weaknesses—it is easily bent and deformed by heat. These disadvantages were greatly improved by a combination of

CNF and polycarbonate resin. The Oji Group provided the technology to CNF composite resin glass exhibited by Toyota Motor East Japan, Inc. at Tokyo Motor Show 2019, with a view to commercialization.



Eco-friendly Products Made from Pulp and Paper

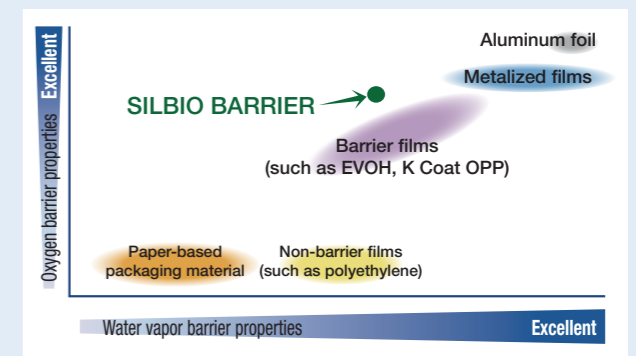
SILBIO BARRIER, a Paper Alternative to Plastic

p.45 p.107

SILBIO BARRIER is a multibarrier paper manufactured using water-based coating technologies. The base paper adding a barrier coating layer prevents oxygen, water vapor, and other substances from passing through, curtailing deterioration of the content. As it has the functions equivalent to those of general barrier films, the multibarrier paper is expected to become an alternative material to plastic packaging materials.

In addition, we are currently accelerating the development of high-performance products with even higher barrier properties comparable to those of metalized films.

Barrier properties of SILBIO BARRIER



PaPiPress, Lids And Packages Made from Pulp

Pulp lids, manufactured using a precise pulp-molding technology, are lids for paper cups with high fittability and applicable to both hot and iced beverages.

Other than lids, the pulp-molding technology is applied to different types of package as an alternative solution to plastic containers.

PaPiPress



Pulp Composites

We are developing pulp composites. Created by mixing pulp into biodegradable plastic, the material has improved in properties such as strength and rigidity.

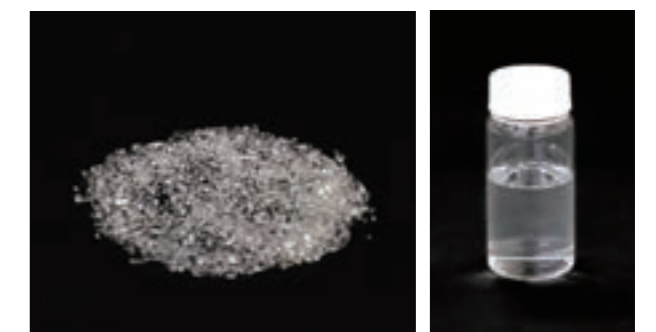
We are proceeding with its commercialization not only to contribute to reduction of the amount of plastic used but also to expand the applications of biodegradable plastic.



Cellulose-derived Biomass Plastics

The Oji Group has been considering manufacturing cellulose-derived biomass plastic. Unlike conventional plastic made from petroleum resources, cellulose is a wood fiber component and can significantly contribute to the reduction of CO₂ emissions from fossil fuel into the atmosphere.

In addition, while most of the sugar used as a raw material for biomass plastic is produced from edible ingredients such as sugar cane and corn, wood is non-edible. This means that cellulose-derived biomass plastic do not contribute to global food shortage problem. We also commenced development of biomass plastic films through the application of our film sheeting technology.



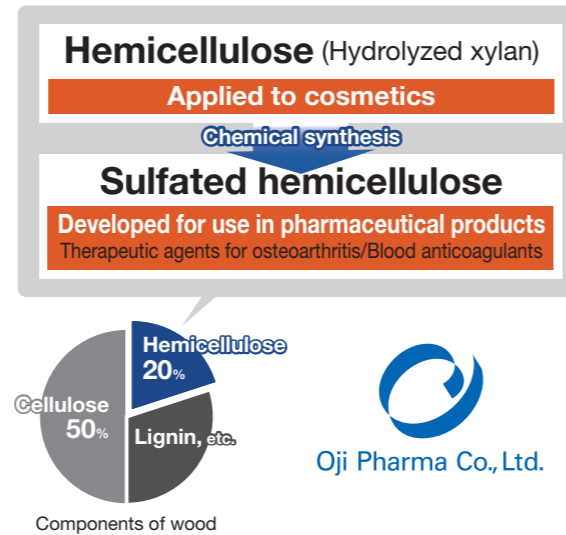
Cellulose-derived biomass plastic (polylactic acid)

Cellulose-derived sugar solution

Active Efforts in the Healthcare Field 2

Wood-derived Pharmaceutical Products – Establishment of Oji Pharma Co., Ltd., our medical and healthcare business –

Hemicellulose is one of the major wood fiber components. Hemicellulose extracted and refined through the Oji Group's proprietary technology, called hydrolyzed xylan, is used as a cosmetic ingredient. We have also developed sulfated hemicellulose, which is a chemically modified hemicellulose, with the aim of further increasing the added value of the wood fiber component. Sulfated hemicellulose is anticipated to have the effects of suppressing inflammation of joints and the bladder as well as blood coagulation. In April 2020, we established Oji Pharma Co., Ltd., as a subsidiary that takes charge of the medical and healthcare field of our business. The new company is promoting the development to utilize wood fiber components as active pharmaceutical components together with domestic and overseas pharmaceutical companies and universities.



Medicinal Plants – Japan's first short-term, large-scale cultivation of licorice –

There are calls for domestic production of licorice, which is used for many Kampo medicines, due to fear of resource depletion and export restrictions. Applying the tree breeding technology, the Oji Group developed cultivation techniques* enabling licorice to grow in a short period of time with a high concentration of a medicinal ingredient, for the first time in Japan, and succeeded in a cultivation trial at our farm. We established the mechanization technology necessary to increase the scale of the business and are now proceeding with a large-scale cultivation trial.



Licorice 13 months after planting

* It takes 1.5 years from sowing to harvesting (regular licorice takes 5 to 6 years). Our licorice contains more glycyrrhizin, a medicinal ingredient, than the medicinal ingredient content standards (2.0%) (our licorice contains 2.3% or more).

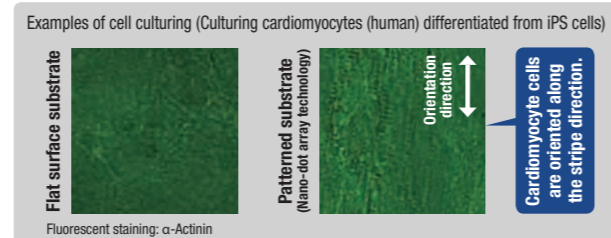
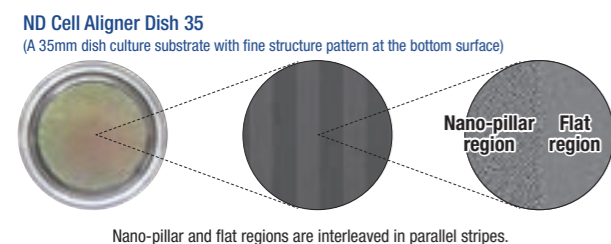
Going forward, the Oji Group will strive for high quality and stable supply of Japanese licorice to build a new business of licorice as a raw material for pharmaceutical products.

Nano-dot Array Technology – Cell culture substrates for controlled cell orientation –

Nano-dot array technology of the Oji Group enables high-precision fine structure fabrication ranging from hundreds nanometers to a few micrometers at the surface. This technology is used to develop diverse applications in such fields as optics and life science.

With the technology, we have developed cell culture substrates that have nano-pillar and flat regions interleaved in parallel stripes. It has been confirmed that when

cells that are oriented in vivo such as cardiomyocytes and myoblast cells are cultured on this substrate, cell sheets are formed in which the long axes of the cells are oriented in the same direction. These cell-sheets with controlled cell orientation exhibit bioactivity similar to that in vivo, and therefore are expected to be used for bio assays and regenerative medicines.

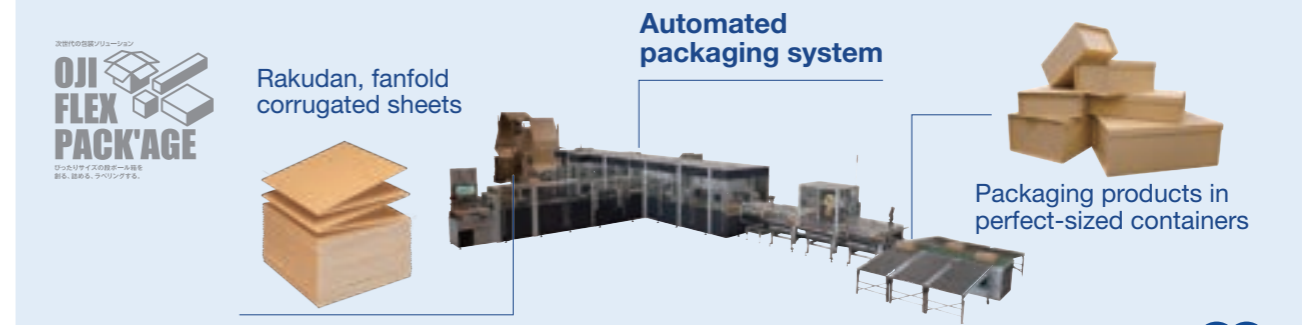


Total Solution 3

Automated Packaging System – OJI FLEX PACK'AGE, a next-generation packaging solution – p.40

Different industries are nowadays faced with packaging and logistics issues in the wake of rapid expansion of the online shopping market. In response to this, the Oji Group has put together the technologies and know-how of packaging materials and packaging machines cultivated over many years, and started to provide "OJI FLEX PACK'AGE," a next-generation packaging solution that enables packaging according to the size of the products. The system, which allows its users to prepare a corrugated container that fits the product perfectly, offers different solutions to meet a

variety of needs: a 3-sided variable system, which uses our fanfold corrugated sheets Rakudan, and a variable height automatic sealing system, which uses standard-sized corrugated containers. Introduction of OJI FLEX PACK'AGE realizes resource saving (corrugated containers and packaging materials), cost saving (improving work efficiency and solving the labor shortage issue through automation), and energy saving (reduction of transportation costs due to improvement in loading efficiency) at once.

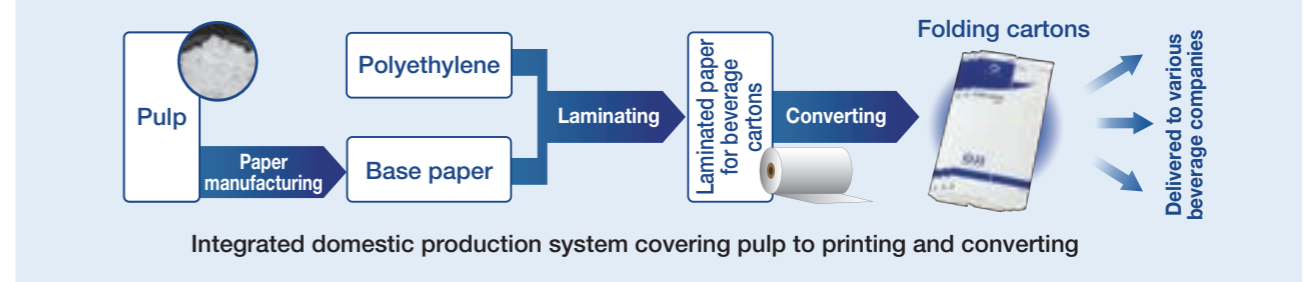


Paper Containers Business – Integrated domestic production system for beverage packages and into foreign markets expansion – p.40

The Oji Group has utilized its core technologies including paper manufacturing technologies and various converting technologies and built an integrated domestic production system covering from paper manufacturing of Japan-made base paper to beverage packages in collaboration with ISHIZUKA GLASS CO., LTD., a general container manufacturer. The integrated system can contribute to advanced quality control, reduction of transportation costs from overseas, stable supply, etc.

In addition to manufacturing paper cartons in Japan, the Paper Containers Business also sells and maintains machines that fill paper cartons with beverages. As such, we leverage the entire services of the business to provide flexible solutions according to customer needs.

In the future, we will utilize our overseas infrastructure to expand the business outside Japan, where demand is expected.



Water Treatment Business p.54

The Oji Group provides customers in and outside Japan with water treatment systems that meet a wide range of needs, based on the paper manufacturing technologies, and the technologies and operational expertise for water production and wastewater treatment, which have been accumulated since the founding. Based on investigation and proposals from various standpoints, we design and build optimal equipment from a broad viewpoint, and

maintain and manage it for the purpose of stable operation (including remote operation) and trouble prevention. In this way, we make available appropriate water quality management solutions from a holistic perspective. We strive to realize a sustainable society by providing stable water treatment technologies and making effective use of limited water resources.