Core Competencies and Material Issues

Core Competencies

The Oji Group possesses Oji Forests spanning 573,000 ha domestically and overseas. As the Group engages in a cycle of cultivating forest resources, utilizing them, and cultivating them again, we are developing a wide range of businesses without regard for business domain. Rooted in our core competencies centered on forest resources, we will aim to develop business and contribute to realizing a sustainable society.

Global Expansion of Manufacturing that Supports Lives and Industry

We are proactively developing our businesses on a global level, including our packaging business, which engages in the integrated manufacturing of folding cartons and corrugated containers from base paper; as well as our household paper, thermal paper, pulp, and other businesses. We are expanding our businesses in response to continuously growing overseas market needs.

Sustainable Forest Management

Giving due consideration to environmental conservation, the Group possesses production forests primarily for producing wood spanning a total of 432,000 ha, with 176,000 ha domestically and 256,000 ha overseas, as well as conservation forests spanning 141,000 ha, with 12,000 ha domestically and 129,000 ha overseas. Implementing sustainable forest management, which is environmentally, socially and economically conscious, forms the basis of our businesses.

Utilization of Renewable Resources

We promote recovered paper recycling. The recovered paper makes up about 60% the raw material of the paper. We also thoroughly circulate and reuse the water that is essential to paper manufacturing in our production processes, and create systems for reducing the amount of water used and purifying wastewater in a sophisticated manner.

Development of New Materials Derived from Wood Fiber

Aiming to create new value, we are developing new materials, including cellulose nanofiber (CNF), a promising material for numerous fields; wood-derived biomass plastics; and wood-derived pharmaceutical products using hemicellulose.

Application of Fundamental Paper **Manufacturing Technologies**

Utilizing the fundamental technologies we have cultivated in our paper manufacturing business, we aim to expand our businesses in various fields which will help reduce our environmental impact. This includes developing our renewable energy business with a focus on hydroelectric power generation and wood biomass power generation, industrial water production and industrial wastewater treatment businesses.

The Oji Group has continuously been working on enhancing corporate value in the medium- and long-term by accurately responding to ever-changing social trends and addressing the needs of customers and society. To develop the sustainable business model that forms the basis of these efforts, material issues have been identified in the following

We have also set qualitative targets and KPIs for each material issue (P85-86).

Process for Identifying Material Issues

Identification of core competencies

We identified five core competencies to support our business development centered on forest resources.

Step2

Extraction of possible

We extracted issues comprehensively from global social issues, disclosed sustainable-related information, the assessment made by ESG assessment organizations, important matters recognized by the Group (forecasting perspective), our goals (backcasting perspective) and dialogue with stakeholders.

Assessment and analysis

We assessed each issue based on both social importance and business importance. The issues were narrowed down and sorted out in reference to opinions from external organizations.

Step3

Validity assessment and approval

We verified the validity of the identified material issues and obtained approval at the ESG Promotion Project and Management Meeting. The necessity of reviewing material issues is discussed at the Sustainability Committee every year as we need to consider such issues as changes in the social environment and newly emerged issues

Material Issues and Reason for Identification

Mitigation and adaptation to climate change

As responding to the progression of climate change becomes an urgent issue, it is essential to reduce GHG emissions in the production and logistics processes, and extensively ramp up CO2 absorption via the expansion of company-owned forests and development of fast-growing trees.

Sustainable forest

To secure a stable supply of raw materials and, at the same time, maintain forests' functions in areas such as conservation of biodiversity and CO2 absorption, it is necessary that we engage in the sustainable management of the vast forests we own in Japan and overseas.

Responsible raw materials procurement The Oji Group's procurement of raw materials is supported by numerous suppliers in Japan and overseas. Working to improve human rights, labor, environmental, and other issues at all of our suppliers, and fulfilling our social responsibilities are essential to the continuation of our business activities.

Stable supply of safe and secure products

As a manufacturer, the core of our business involves strengthening relationships of trust while building a system which provides services and quality which customers in a variety of fields can

environmental burdens

We have a responsibility to promote the prevention of environmental pollution, and to contribute to the conservation of local environments, we establish voluntary management standards which are even stricter than existing laws and regulations regarding wastewater and emissions.

Effective resource

It is important that we work to protect resources and reduce waste by maintaining our recovered paper recycling systems through the procurement of recovered paper at fair prices, promoting the use of recovered paper, and promoting the effective use of waste and water resources in our manufacturing processes.

Respect for human

To achieve an even greater level of globalization going forward, it is necessary that not only our employees but all of our suppliers share our beliefs regarding respect for human rights, and implement concrete initiatives which will help prevent human rights issues.



Ensuring employee safety and building a work environment where people can work with a sense of security is the cornerstone of our continued existence as a corporation. Also, responding rapidly to disasters, infectious diseases, and other risks is essential to ensuring safety and health.

Inclusion & diversity

As a global enterprise, it is essential to have a diverse array of human resources that flourishes regardless of gender, age, disability, or nationality, and to be receptive to a variety of values and ideas to enhance corporate competitiveness and further development.

Material Issues and KPI

Material issues	Qualitative targets	Key performance indicators (KPIs) (Unless otherwise specified, for FY2030)	Current value*1	Major initiatives	Value provided to society	Corresponding SDGs	Reference
Mitigation and adaptation to climate change	 Reduce GHG emissions Maintain and expand CO₂ absorption and fixation through forest conservation Increase the usage of renewable energy Improve energy efficiency 	Reduce GHG emissions by at least 70% compared to FY2018 GHG emissions reduction: 20% Net increment in carbon stocks by forests: 50% The actual carbon stocks in living biomass*2 expanded to at least 170,000 kt-C02 (calculated value) Renewable energy usage rate of at least 60% through reduction of coal consumption Energy consumption intensity at least 1% per year for the 5-year average	 11.3% reduction 3.0% 8.3% 109,000 kt-CO₂ 54.7% 1.8% reduction (Five-year average from 2017 to 2021) 	ment Expanded use of non-fossil fuels and biomass fuels as alternatives to coal	 Mitigation of climate change Increase in the usage of renewable energy Improve in energy efficiency Enhancement of eco-friendly technologies 	7 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	P25~30
Sustainable forest management (forest recycling)	Increase forest certification acquisition rate Maintain and expand overseas forest plantation	 Increase the rate of overseas forest certification acquisition*³ (maintain the domestic rate at 100%) 400,000 ha of overseas forest plantations 	Japan 100%, Overseas 92% 256,000 ha (Conservation forests 129,000 ha)	Forest management based on the "Sustainable Forest Management Policy" Maintain and expand the multi-functions of forests Sustainable forest management such as promotion of forest plantation and conservation of company-owned forests	 Conservation of biodiversity and ecosystem Job creation Employment, education, and medical support 	6.6 8.7 14.2 15.3,15.4 15.5,15.c	P31~34
Responsible raw materials procurement	Manage the supply chain thoroughly	Conduct sustainability surveys on all main suppliers*4 Achieve full traceability based on the Wood Raw Material Procurement Guidelines	(Survey period: FY2020 - FY2022. Follow-up surveys to be conducted later.) 100%	Promote CSR procurement, taking into consideration the environment and society following the Oji Group Partnership Procurement Policy and the Wood Raw Material Procurement Guidelines	Forms of responsible production and consumption Protection of the rights of workers and reduction of environmental impact throughout the entire supply chain	8 months on a 12 months on a 15 m s 15 m s 1	P87~88
Reduction of environmental burdens (air, water and waste)	Promote purification of wastewater and exhaust gases Increase effective waste utilization ratios	 Reduce emission intensity for substances of environmental concern in wastewater by 15% from FY2018 Reduce SOx emissions intensity in exhaust gases by 15% from FY2018 Improve effective waste utilization ratios*5 Japan at least 99%, Overseas at least 95% 	 BOD: 5.9% reduction, COD: +8.3%, SS: 12.9% reduction 10.5% reduction Japan 99.1%, Overseas 89.1% 	Set voluntary management values that are stricter than the environmental regulatory standards Purify wastewater and save emissions of chemical substances in exhaust gases Reduce and effectively use waste Develop eco-friendly products and biodegradable materials	Safety and healthReduction of air and water pollution	3.9 6.1,6.3,6.4 11.6 14.1,14.2 14.3 17.7,17.8	Refer to the website
Effective resource utilization (paper and water recycling)	Improve the recovered paper utilization ratio Reduce water intake intensity	Recovered paper utilization ratio*6 (Japan): At least 70% Water intake intensity Reduction of at least 6% compared to FY2018	• 67.1% • +1.8%	Paper recycling (improve the recovered paper utilization ratio) Reduce water intake and improve water recycling Expand the water treatment business overseas	Mitigation of climate change Reduction of waste Contribution to the solution of the water shortage issue Safe water supply	6.4,6.5 12.4,12.5 14.1 15.1,15.2 15.3,15.4 15.5,15.6	P89~92
Stable supply of safe and secure products	Continue zero product liability accidents	Zero product liability accidents (each fiscal year)	 Zero accidents (continued since 1998) 	Stably supply own products Ensure safe quality design and management in compliance with relevant laws and regulations and stricter voluntary management values Provide customers with information on safety of raw materials (chemicals, materials) Supply of FSC™ certified products (FSC™ C014119, etc.)	 Supply of safe and secure products Reduction of environmental burdens Dissemination of eco-friendly technologies to developing countries 	9 44.9.b 12.4,12.6 17.7	P88
Respect for human rights	 Provide education and training in human rights 	Percentage of target people who get education and training in human rights: 100%	Attendance for education and training in human rights as part of target training: 97.9% (2,640 participants)	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 and implement the whis- tleblowing system Raise awareness of compliance and human rights through in-house training Assess risks associated with suppliers' respect for human rights Implement human rights due diligence	 Respect for human rights 	5 mm 8 mm on	P93
Ensuring workplace safety and health	Achieve zero fatal and serious work-related accidents Reduce lost time injury frequency rate Reinforce safety management systems, safety risk management systems, and safety education	 Achieve zero fatal and serious work-related accidents*7 (each fiscal year) Lost time injury frequency rate*8: 50% reduction compared to FY2018 (0.89) 	 Zero accidents (from January 1 to December 31, 2021) 0.97 (from January 1 to December 31, 2021) 	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	 Safety and health 	8 mont rear on. 8 mont rear on. 8.8.8	P97~98
Inclusion & diversity	Raise the percentage of female managers Raise the employment rate of people with disabilities	Percentage of female managers*8: 5.5% (Japan, end of March 2025) Employment rate of people with disabilities*8: 2.3% (Japan, June 2023)	• 3.7% (16 companies in Japan) • Six applicable Group companies in Japan*8: 2.35% Group companies in Japan*8: 2.10% (June 2022)	 Implement human resource strategies and develop human resources Promote working style reforms Promote diversity 	Active participation of diverse human resources Realization of innovation Improvement in productivity	5 tune 8 tuner tent 10 tuner tent 15.1,5.4 5.5,5.c 8.8 10.2,10.3	P94~96

^{*1} Aggregation period: Unless otherwise specified, from April 2021 to March 2022 or as of March 31, 2022. Boundary of data aggregation: Unless otherwise specified, Japanese and overseas consoli-

History of the Oji Group's What the Oji Group Value Creation Aims For

Production forest: Actual merchantable volume at the end of FY2021 x Biomass expansion coefficient x (1 + underground / above-ground ratio) x Wood density x Carbon ratio x CO₂ conversion

Conservation forest: Remaining area at the end of FY2021 x above-ground biomass of natural forest x (1 + underground / above-ground ratio) x carbon ratio x CO₂ conversion coefficient.

^{*3} Forest certification acquisition rate: [Overseas] Area ratio in company-owned production forests, [Japan] Area ratio in company-owned forests excluding shared forests

^{*4} Suppliers in top 75% of transaction amount

^{*5} Effective waste utilization ratio = (Amount of waste generated – Amount of landfill waste) \div Amount of waste generated \times 100

^{*6} Recovered paper utilization ratio = Volume of recovered paper consumed ÷ Total volume of fiber raw materials consumed (total consumption of recovered paper, wood pulp, and other fiber

^{*7} Serious accidents: The Oji Group considers accidents of Class 3 or higher as per the Appended Table of the Enforcement Regulation of the Workers' Accident Compensation Insurance Act to be serious accidents.

^{*8} For the calculation method, see P107.