

Value Creation Model

Under the management philosophy of “Creation of Innovative Value,” “Contribution to the Future and the World” and “Harmony with Nature and Society,” the Oji Group is striving to ensure that its business itself contributes to a sustainable society by deploying the sustainability strategy globally. The Group sets “Contribution to a Sustainable Society” as the foundation of our FY2019 to FY2021 Medium-term Management Plan and provides various values to society and contributes to the genuine enrichment of society by steadily implementing the three pillars of “Profitability Improvement of Domestic Business,” “Expansion of Overseas Business,” and “Promotion of Innovation.”

[Sustainability Strategy]

The Oji Group will promote “resource circulation throughout the value chain” through five core competencies centered on forest resources.

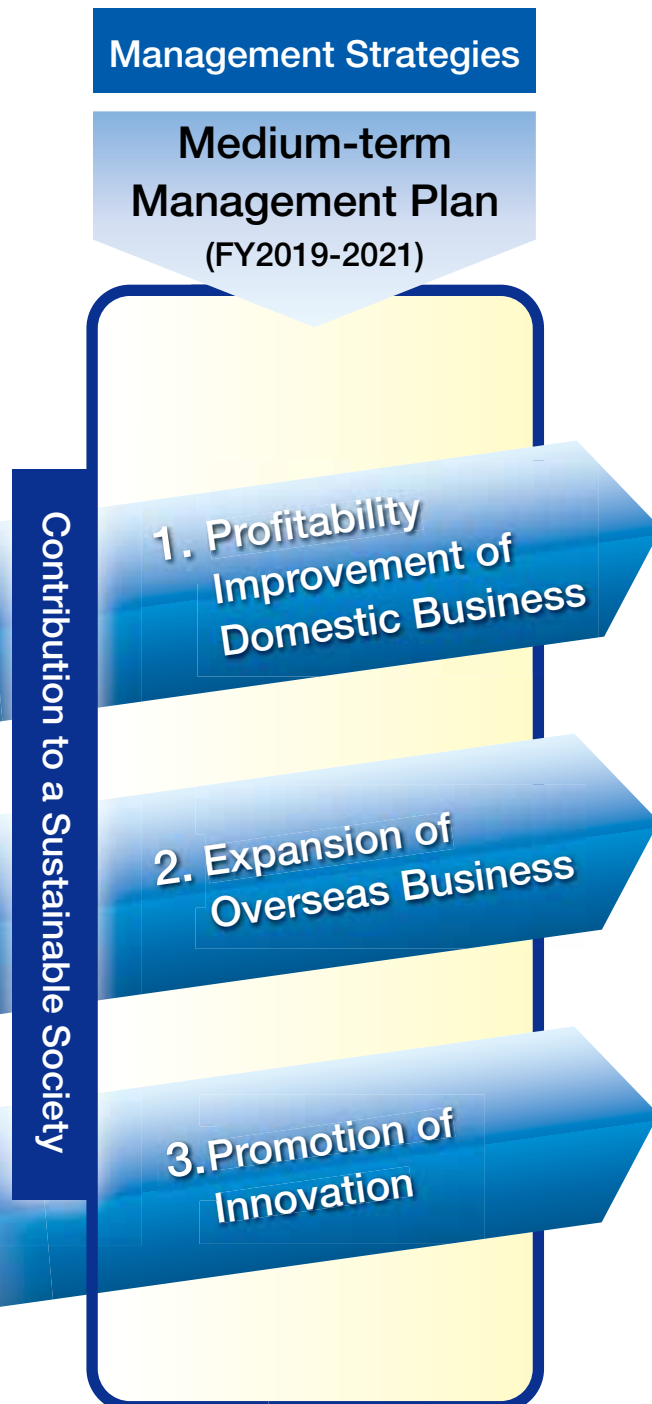
Five core competencies: “**Manufacturing that Supports Lives and Industry**,” “**Sustainable Forest Management** (forest recycling),” “**Utilization of Renewable Resources** (water recycling, paper recycling),” “**Application of Fundamental Paper Manufacturing Technologies** (deployment of renewable energy such as biomass power generation)” and “**Development of New Materials Derived from Wood Fiber** (cellulose nano-fibers, etc.).”

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 societies and work toward 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.



Value provided to society through business

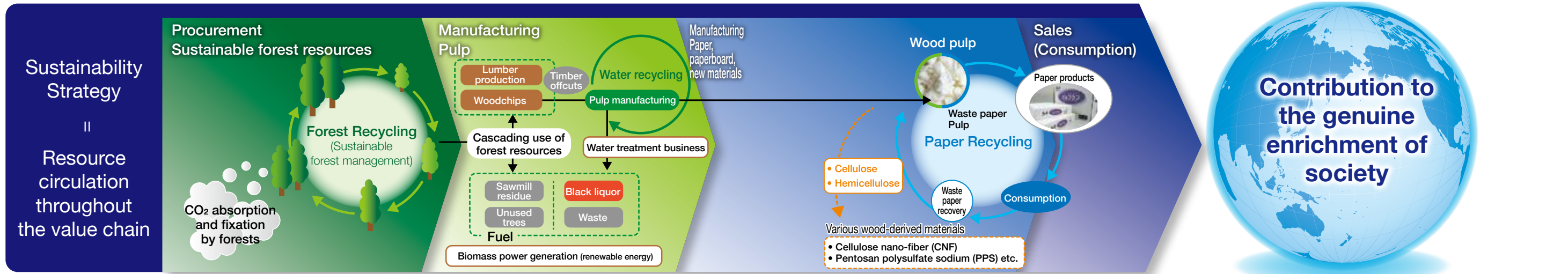
- Forest conservation
- Responsible production and consumption forms
- Supply of safe and secure products
- Transfer of technologies to emerging countries
- Solutions to the issue of plastic in the ocean
- Shift from fossil fuels to non-fossil fuels
- Mitigation of climate change
- Safe water supply
- Promotion of recycling systems
- Respect for human rights
- Safety and health
- Diversity & Inclusion

Contribution to the genuine enrichment of society

- Corporate Profile
- What the Oji Group Aims For
- Management Strategy
- Financial Highlights and Non-financial Highlights
- Business Strategy
- Governance
- Environment
- Society
- Financial Information

Sustainability Strategy and Material Issues

* We have identified material issues in our sustainability strategy and are addressing them in the value chain.



Material issues	Measures in the value chain			Value provided to society	Corresponding SDGs	
Sustainable forest management	Conservation of forests and biodiversity	Forest certification acquisition	Acquisition of certifications throughout the value chain (CoC certification)	Forest conservation	Responsible production and consumption forms	
	Development of infrastructure in areas near forests					
Responsible raw materials procurement	Compliance with Group procurement policies	Raw materials procurement that satisfies certification and management standards	Forest certification acquisition	Forest conservation	Responsible production and consumption forms	
	Proper management of raw materials					
Stable supply of safe and secure products	Compliance with raw materials safety confirmation standards	Measures for stable operations	Accountability for inquiries from customers	Supply of safe and secure products	Transfer of technology to emerging countries	
	Transfer of technology to emerging countries					
Promotion of innovation	Promotion of Green Innovation	Development of raw materials for biodegradable plastics	(promoting development of eco-friendly products and technologies)	Solutions to the issue of plastic in the ocean	Safety and health	
	Development of pharmaceutical products					
Mitigation and adaptation to climate change	Maintenance and enhancement of CO ₂ absorption and fixation through forest conservation	Shift from fossil fuels to non-fossil fuels (renewable fuels and fuels made from waste)	Reduction of CO ₂ emissions during transportation	Shift from fossil fuels to non-fossil fuels	Mitigation of climate change	
	Reduction of CO ₂ emissions during transportation					
Reduction of environmental burdens	Reduction of wastewater, exhaust gas and waste (compliance with voluntary chemical substance management)	values that are stricter than regulatory values)	Deployment of waste water treatment technology	Safety and health	Safe water supply	
	Deployment of waste water treatment technology					
Effective resource utilization	Waste paper recycling	Improvement of the recovered paper utilization ratio	Maintenance and promotion of recovered paper recycling systems	Promotion of recycling systems		
	Efficient use of water					
Respect for human rights	Checks on the status of respect for human rights by suppliers	Checks on the status of respect for human rights at manufacturing sites and contractor sites	(awareness surveys, etc.)	Respect for human rights		
	Promotion of respect for human rights at group companies					
Ensuring worksite safety and health	Rigorously ensuring the safety of machinery, equipment, and work, and raising hazard	Promotion of the physical and mental well-being of workers	sensitivity through experience-based training (virtual reality, etc.)	Safety and health		
	Promotion of the physical and mental well-being of workers					
Diversity & Inclusion	Working style reforms	Change mindset and behavior of management level employees	Improvement in employee work-life management	Diversity & Inclusion		
	Demonstration of the abilities and career development of diverse human resources					
Contribution to local communities and society	Conservation of biodiversity in collaboration with local communities	Activities that contribute to local communities in areas near manufacturing sites (recycling measures, youth education, Environmental education, and cultural and sports programs)	cultural exchanges, environmental conservation, healthcare support)			
	Environmental education, and cultural and sports programs					
Dialogue with stakeholders	Appropriate information disclosures	Attentive communications with individual stakeholders				
	Attentive communications with individual stakeholders					

Material Issues and KPI

* KPIs are set for each material issue.

Material issues	Qualitative target*1	Key performance indicators (KPI)*1 (Unless otherwise specified, until 2030)	Current value*1 (Unless otherwise specified, as of the end of March 2019)	Calculation formula
Sustainable forest management	<ul style="list-style-type: none"> Increase the rate of overseas forest certification acquisition (maintain the domestic rate at 100%) Increase overseas forest plantations 	<ul style="list-style-type: none"> Seek 100% rate of forest certification acquisition for all forest plantations 400,000 ha² of overseas forest plantations 	<ul style="list-style-type: none"> Rate of forest certification acquisition [Japan] 100% (excluding profit sharing forests); [overseas] 85% 250,000 ha of overseas forest plantations 	<ul style="list-style-type: none"> [Japan] Forest certification acquisition rate = Certification acquisition area (ha) ÷ Managed and owned areas excluding profit sharing forest (ha) [Overseas] Forest certification acquisition rate = Certification acquisition area (ha) ÷ Planted area (ha)
Responsible raw materials procurement	<ul style="list-style-type: none"> Procure raw materials in accordance with Group Procurement Guidelines and implement supply chain management 	—	—	—
Stable supply of safe and secure products	<ul style="list-style-type: none"> Continue zero product liability accidents 	<ul style="list-style-type: none"> Zero product liability accidents (each fiscal year) 	<ul style="list-style-type: none"> Zero product liability accidents (continued from 1998) 	—
Promotion of innovation	<ul style="list-style-type: none"> Commercialize eco-friendly products 	—	—	—
Mitigation and adaptation to climate change	<ul style="list-style-type: none"> Reduce GHG³ emissions intensity Maintain and expand CO₂ absorption and fixation through forest conservation Maintain and expand the shift to non-fossil fuels Use energy efficiently 	<ul style="list-style-type: none"> Reduce GHG emissions intensity from product manufacturing by at least 10% compared to FY2013 by FY2020 Fix at least 170 million tons of CO₂ (estimated value) Reduce energy consumption intensity by at least 1.0% compared to the previous fiscal year 	<ul style="list-style-type: none"> GHG emissions intensity: 9.0% reduction from FY2013 CO₂ fixation amount: 120 million tons Energy consumption intensity: 1.4% reduction compared to the previous fiscal year 	<ul style="list-style-type: none"> CO₂ fixation amount (CO₂ tons) = Residual cumulative volume m³ at end of FY2018 × Biomass expansion factor 1.7 × Bulk weight BDT/m³ × Carbon ratio 0.5 × CO₂ conversion factor 44/12 *BDT: Bone dry tons
Reduction of environmental burdens (atmosphere, water, waste)	<ul style="list-style-type: none"> Reduce waste Acquire environmental certification (ISO 14001, etc.) 	<ul style="list-style-type: none"> Achieve effective waste utilization ratios of at least 99% in Japan and at least 95% overseas (2020) 	<ul style="list-style-type: none"> Effective waste utilization ratio [Japan] 98.3% [Overseas] 89.6% 	<ul style="list-style-type: none"> Effective waste utilization ratio = (Volume of waste generated - Volume of landfill waste) ÷ Volume of waste generated × 100
Effective resource utilization	<ul style="list-style-type: none"> Improve the recovered paper utilization ratio Reduce water usage intensity 	<ul style="list-style-type: none"> Recovered paper utilization ratio of at least 65% in Japan Reduce water usage intensity accompanying product manufacturing by at least 1% from the previous year 	<ul style="list-style-type: none"> Recovered paper utilization rate: 64.0% Water usage intensity: Down 0.8% from FY2017 	<ul style="list-style-type: none"> Recovered paper utilization ratio = Volume of paper consumed ÷ Total volume of fiber raw materials consumed (total consumption of recovered paper, wood pulp, and other fiber raw materials)
Respect for human rights	<ul style="list-style-type: none"> Reinforce human rights management systems (particularly at overseas sites) 	—	—	—
Ensuring worksite safety and health	<ul style="list-style-type: none"> Eliminate fatal accidents Reduce the lost time injury frequency rate (LTIFR)⁴ Reinforce safety risk management systems and safety education at overseas offices 	<ul style="list-style-type: none"> Zero fatal accidents (each fiscal year) Reduced the lost time injury frequency rate (LTIFR) by 50% compared to 2018 	<ul style="list-style-type: none"> Number of fatal accidents: 0 (consolidated companies) Lost time injury frequency rate (LTIFR): 0.55 (consolidated companies, January 1 to December 31, 2018) 	<ul style="list-style-type: none"> Lost time injury frequency rate (LTIFR) = (Number of occupational accident casualties ÷ Total work hours) × 1,000,000
Diversity & Inclusion	<ul style="list-style-type: none"> Globalize the workforce (The following apply to Japan) Raise the percentage of female managers Raise the percentage of disabled employees Improve work-life management 	<ul style="list-style-type: none"> Percentage of female managers [Japan] 10% (6% in 2020) Percentage of disabled employees [Japan] 2.34% (2021) 	<ul style="list-style-type: none"> Percentage of female managers [Japan] 3.1% (16 Oji Group companies) Percentage of disabled employees [Japan] 1.83% (as of June 2018) 	<ul style="list-style-type: none"> Percentage of female managers = Number of female managers ÷ Number of all managers Percentage of disabled employees (employment rate) = Number of regular workers with physical or intellectual impairments or with mental illness ÷ Number of all regular workers * Workers with short working hours are counted as 0.5 workers * Persons with severe disabilities are counted as two persons
Contribution to local communities and society	<ul style="list-style-type: none"> Conduct environmental education Promote cultural and sports activities 	—	—	—
Dialogue with stakeholders	<ul style="list-style-type: none"> Transparent and appropriate disclosures via websites and integrated reports 	—	—	—

*1 Unless otherwise specified, Japanese and overseas consolidated companies

*2 ha = 10,000m²

*3 Greenhouse Gas

*4 Lost time injury frequency rate (LTIFR)

(1) Covered period: January 1 to December 31

(2) Number of deaths and injuries due to occupational accidents per million working hours (fatal accidents and accidents with at least one day off)

(3) Total working hours are calculated based on the number of group company employees (regular employees and temporary / non-regular employees) as of the end of September every year, assuming the annual working hours per person is 2,000 hours.

(4) The frequency rate calculation does not include accidents at overseas group companies that are determined to be at the level of accidents accompanied by injuries without lost work days in Japan based on standards established by the Company.