

PROGRESS OF MID-TERM BUSINESS PLAN (MTBP) 2025

ADDRESSING IMMEDIATE ISSUES AND
ACCELERATING BUSINESS STRUCTURE TRANSFORMATION

May 13, 2022



NIPPON PAPER INDUSTRIES
SHAPING THE FUTURE WITH TREES 



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 - (2) Restructuring paper business
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1. Basic strategies and financial targets of MTBP 2025

The following defines the **Comprehensive Biomass Company** which Nippon Paper Group is aiming for.

A company group that consists of multiple businesses which generate stable profits and realize better living and cultural progress. It achieves this by using diverse technologies and know-how to maximize the use of renewable woody resources. This provides a wide range of products that help form a circulation-oriented society, supporting profit growth.

Basic Strategy

Acceleration of business structure transformation

Priority Tasks

- **Reallocate management resources to growing businesses**
- **Accelerate enhancing profitability of new businesses**
- **Reinforce competitiveness of foundation businesses**

Financial Targets

- **Net sales** FY2026/3 **1,100.0 billion yen**
- **Operating income** At an early stage **40.0 billion yen or more**
- **EBITDA** Stably **100.0 billion yen**
- **Debt/equity ratio** FY2026/3 **1.5 to 1.6 times**
- **ROE** FY2026/3 **5.0% or more**



Major initiatives in FY2022/3

Foundation Business (Paper Business)	<ul style="list-style-type: none">● Reduced paper production capacity 500 thousand tonnes Withdrawal from pulp and paper business at Kushiro Mill Permanent shutdown of N6 machine at Ishinomaki Mill planned in May 2022● Increased paper price
Growing businesses New Businesses	<ul style="list-style-type: none">● Promoted various environmentally friendly products in the packaging areas● Strengthened paperboard distribution and sales channels● Deployed the strategy to spread long-lasting household paper products● Promoted overseas expansion of the Paper-pak business● Increased production capacity for functional cellulose and coating resins● Developed the market for CNF and other new cellulose products● Strengthened profitability of overseas packaging business (Opal and NDP)● Increased price for paperboard, household paper, liquid packaging carton, and chemical products
Sustainability ESG	<ul style="list-style-type: none">● Reduction of coal usage● Promotion of green strategy● Strengthen BCP● Promotion of recycling● Strengthening governance

In FY2022/3, the Group increased product prices in addition to originally planned measures in the MTBP to transform business structure.



Net sales and operating income by segment

(billion yen)

	FY2022/3 Initial Plan		FY2022/3 Actual		MTBP2025 Targets	
	Net sales	Operating Income	Net sales	Operating Income	Net sales	Operating Income
Paper and paperboard	535.0	1.5	532.1	-5.6	490.0	5.0
Daily-life products	380.0	11.0	386.5	4.8	460.0	27.5
Energy	30.0	4.5	31.8	1.6	45.0	4.0
Wood products and construction related	55.0	6.5	64.5	7.6	75.0	6.5
Others	30.0	1.5	30.2	3.7	30.0	2.0
Acquisition-related expenses	-	-	-	-	-	-
Energy conversion	-	-	-	-	-	-5.0
Total	1,030.0	25.0	1,045.1	12.1	1,100.0	40.0

- In FY2022/3, the initial plan was not achieved due to soaring raw material and fuel prices.
- Extremely challenging business environment is expected to continue in FY2023/3 due to high resource prices and declining demand

3. Main challenges in FY2023/3

Current business environment (risks and opportunities)

Changes in the business environment	Risks	Opportunities
Prolonged impact caused by Ukraine situation (Continued turmoil in global supply chain)	<ul style="list-style-type: none"> ● <u>Raw material and fuel prices stay at high level</u> 	<ul style="list-style-type: none"> ● Increase in sales opportunities for lumber, pulp, etc.
Inflation and FX fluctuations (possible recession)	<ul style="list-style-type: none"> ● <u>Further decrease on paper demand</u> ● Increase in various costs 	<ul style="list-style-type: none"> ● Better export profitability due to yen depreciation
Continued turmoil in ocean logistics	<ul style="list-style-type: none"> ● Increase in logistics costs ● Stagnant procurement and product shipments 	<ul style="list-style-type: none"> ● Increase demand for domestic products
Further increasing demands for GHG Reductions	<ul style="list-style-type: none"> ● <u>Market product selection by GHG Emissions</u> ● Carbon pricing implementation in early stage 	<ul style="list-style-type: none"> ● Enhancing the value of forest resources ● Market expansion of biomass products ● Implementation of carbon credit scheme
Acceleration of reducing plastic usage	<ul style="list-style-type: none"> ● Back to plastics by establishing reuse technology, etc. 	<ul style="list-style-type: none"> ● Increase demand for paper and biomass products as a substitution
New lifestyles created by Covid-19	<ul style="list-style-type: none"> ● <u>Further contraction of paper demand due to digitization and other factors</u> 	<ul style="list-style-type: none"> ● Sales expansion on household paper and health care products matching higher attention to hygiene

3. Main challenges in FY2023/3

Current business environment (our risk awareness)

- The business environment has drastically and dramatically changed.
Raw material and fuel prices are expected to remain high for the time being.
- The surge in fossil fuel prices is synonymous with the arrival of carbon pricing ahead of schedule.
GHG reduction (= coal usage reduction) is a challenge that brings direct impact to our profit.
- In the paper business, the business environment deteriorated further due to a decrease in demand caused by the Covid-19 and soaring coal prices.
Structural reforms must be carried out even more rapidly.
- Other than paper businesses secure a certain profit even in a difficult environment.
However, Opal of which earnings are slow to recover must improve its profitability as soon as possible.

■ Main challenges in FY2023/3

(1) Accelerating the coal usage reduction

(2) Restructuring Paper business

(3) Improving Opal's profitability

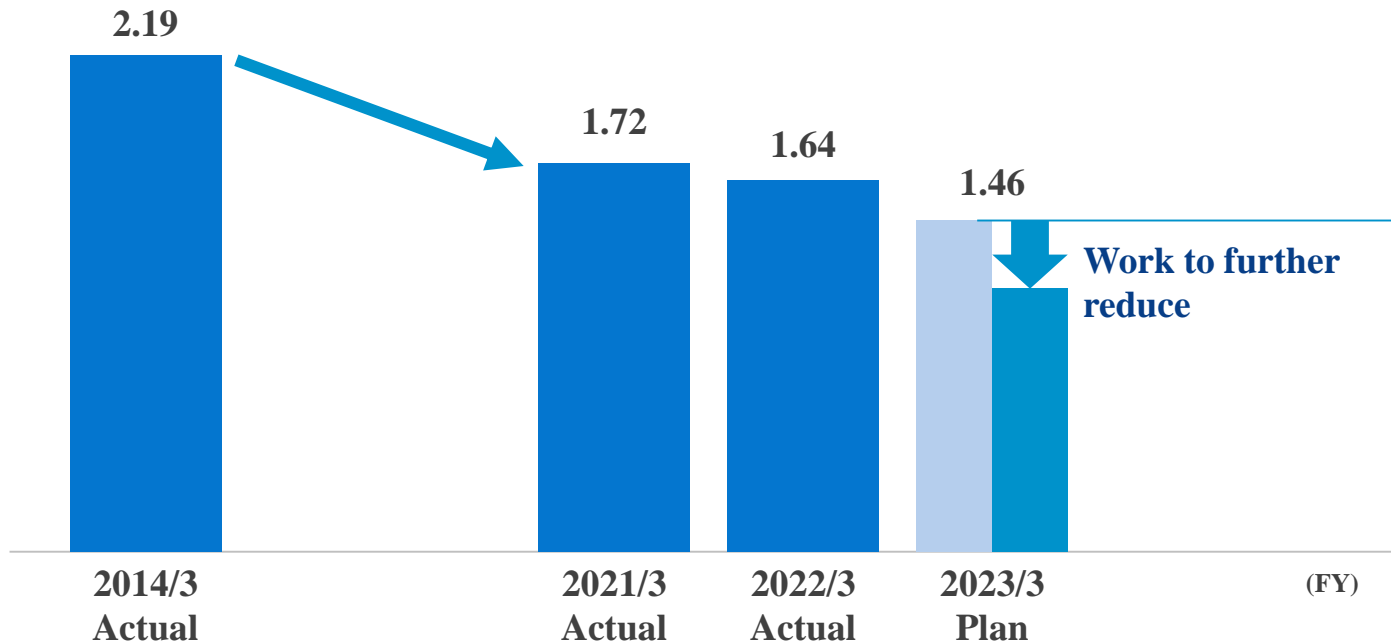
Strengthening initiatives with a strong sense of crisis in response to rapid changes in the business environment



3. Main challenges in FY2023/3 (1) Accelerating the coal usage reduction

- Reduce the coal usage further as an urgent measure to improve profitability as well as GHG reduction measures

◆ Coal usage (million tonnes) *Nippon Paper Industries (for in-house consumption)



- Work to drastically reduce coal usage in time with cessation of purchase of Russian coal (approximately 300 thousand tonnes)
- Reinforcing measures that directly lead to reductions such as energy saving, fuel conversion, maximum use of KP black liquor, control of output of coal boilers, consolidation of shutdowns, etc.



3. Main challenges in FY2023/3 (2) Restructuring Paper business

● **Strengthen profitability in all areas of procurement, production, and sales on the assumption that raw material and fuel prices remain high**

- **Measures as we have done to date are not sufficient for the paper business to balance profitability**
- **Capturing this severe situations as opportunities and step up with further structural reform**

■ **Cost reduction**

- Reduce variable and fixed costs without being constrained by conventional concepts

■ **Improving production efficiency**

- Establish an operation system that realizes a reduction in coal usage
- Maximize production efficiency by narrowing down production items, etc.

■ **Review of production structure**

- By reviewing the production structure in an integrated manner with coal reduction
- Drafting a new production reorganization plan during 1H of FY2023/3

■ **Second price increase**

- Determine depending on trends in raw material and fuel prices



Aiming to secure positive profit in the paper business at an early stage



● **Accelerate structural reforms by shifting management resources from paper to packaging, while strengthening the recent improvement in profitability**

- **In FY2022/3, the initial financial target was not achieved although the deficit shrank compared to the previous year.**
- **Additional price increase and cost reduction are planned**
- **Increase earnings by strengthening integrated packaging structure**

■ **Sales volume recovery, price increase, and ocean logistics measures**

- Steadily capture sales opportunities by recovering demand and market growth
- Additional price increases will be implemented for both paper and packaging.
- Mitigate the impact of disruptions in ocean logistics through in-house production of imported base paper and diversification of product export destinations, etc.

■ **Steady realization of synergy effects**

- FY 2022/3 result A\$25 million, FY 2023/3 forecast A\$28 million

■ **Strengthening the integrated packaging production system**

- Promote in-house production of packaging base papers
- Exploring investment options, including a new corrugated box plant and upgrading facilities at existing box plants



**Return to positive profit in FY2023/3,
aiming to increase earnings from FY2024/3 onward**



4. Strengthen growing businesses and new businesses

- Growth measures for growing businesses and new businesses generally progressed as planned
Aiming to expand sales and earnings by steadily implementing each measure

■ Paperboard business

Secure stable earnings by capturing growing markets and increasing added value

- Expansion of distribution functions by Dia Trading Co., Ltd. (established in April 2022)
- Development of high-value-added products utilizing in-house kraft pulp



- To increase sales volume by capturing demand for beverages and processed foods and e-commerce-related products
- Develop new customers with newly developed products

■ Paper-Pak business

Expand sales of next-generation paper containers and accelerate expansion in overseas markets

- Promoting sales expansion of School POP® and NSATOM®
- Deepening ties with Elopak
- Strengthen collaboration with NDP in US



- To expand earnings centered on high-value-added products
- Accelerate overseas expansion by aiming to capture a 10% market share of the Oceania region in the next five years

■ NDP in US

Increase earnings as a premium supplier of base paper for packaging

- Cooperating with the Paper-Pak business to develop high-value-added products
- Maximize sales volume of dry pulp



- Secure stable earnings by capturing growing demand for base paper for packaging
- Increase earnings by adding more value to products



4. Strengthen growing businesses and new businesses

■ Household paper and healthcare business

Expand sales by developing products that anticipate needs and product differentiation

- Maximize use of pulp within the Group
- Improving quality and introducing new products through proprietary technologies
- Increase prices



- To secure earnings by enhancing cost competitiveness
- Expand sales through differentiated products

■ Chemical and new material business

Accelerate business structure transformation by expanding sales of chemical products and cellulose products

- Steady realization of CAPEX effects
- Develop markets for new cellulose products and quickly establish large scale manufacturing technologies



- Expand sales through timely investment in anticipation of demand trends
- Expand sales of new materials products that help solve social needs and issues

■ Energy business

Secure stable earnings while keeping an eye on policy and social trends

- Operation of the Yufutsu biomass power plant
 - Steady progress in construction work to start its operations in January 2023



- To secure stable earnings over the medium to long term

■ Wood/Building Material business (Nippon Paper Lumber)

Drive the Group's forest management and lumber business as a leading domestic lumber company

- Expansion of domestic lumber business
- Strengthen biomass fuel and non-fossil fuel businesses



- Achieve one million m3 of domestically produced wood as annually handled volume
- Aiming for three million tonnes of fuel handled in FY2024/3



5. Strengthen Sustainability Management

To accelerate the reduction of GHG emissions

● Accelerate reduction of GHG emissions and review the targets of the 2030 Vision

- **2030 Vision (Target): Reduce by 45% compared to FY2014/3 (Scope1+Scope2)**
- **FY2022/3 (Actual): Reduce by 19% compared to FY2014/3**

◆ Main measures to reduce GHG emissions

● Further promotion of coal usage reduction through energy saving and fuel conversion

- Energy-saving target of annual 1.0% per year at paper and paperboard mills
- Maximum use of waste fuel and recycled fuel
- Exploration and development of new fuels through collaboration with local governments and other industries
- Practical application of next-generation fuels (black pellets, etc.)

● Consider reorganization of production structure and GHG reductions in an integrated manner

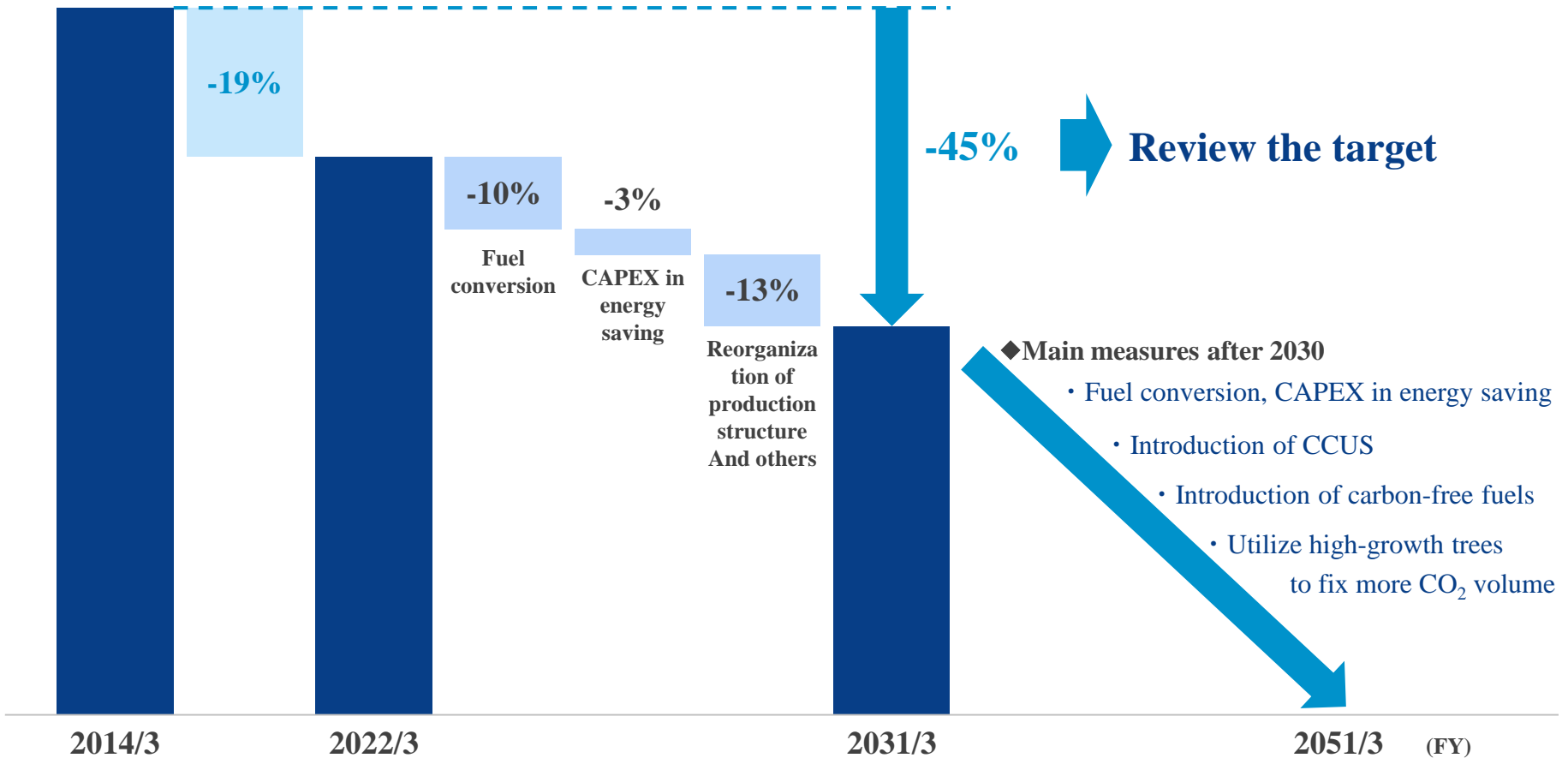
- Reviewing the production structure based on the premise of stopping coal boilers and curbing output

● Participation in the process of making rules such as carbon pricing

5. Strengthen Sustainability Management

Roadmap for Carbon Neutral

■ GHG emissions



Become carbon neutral

5. Strengthen sustainability management

Green Strategy

Our strategy is unique. It is to strengthen our business foundation and to contribute to the creation of a circulation-oriented society through spreading biomass products while maximizing the various values of forests.

◆ Overseas plantation

- **Enhancement of breeding and propagation technologies, and improvement of CO₂ fixation efficiencies**
 - Increase CO₂ fixation efficiency ratio of the overseas plantation business by 30% by FY2031/3 (compared to FY2014/3)
- **Securing forest resources by licensing to other companies' plantation projects**
 - Signed the strategic partnership agreement with Marubeni Corporation in relation to Indonesian plantation business in March 2022
- **Securing plantation resources**
 - Studying feasibility of securing plantation lands mainly in Asia with a target of 100 thousand ha

◆ Domestic company-owned forests

- **Expansion of elite tree seedling production business**
 - Acquired “licensed propagator of specified plants” in four prefectures: Shizuoka, Tottori, Hiroshima, and Oita
- **Maintenance of public benefits**

◆ Carbon credits

- **Establishment of methods for calculating CO₂ absorptions and fixation volumes**
- **Participation in making rules for creation of environmental value credits (endorsement of the GX League Basic Concept)**
- **Promote utilization of existing systems such as J-Credit**

5. Strengthen sustainability management

Strengthen BCP

◆ Strengthening measures for natural disasters

- After the earthquake in February 2021, Iwanuma Mill changed the building materials to reduce its weight and implemented other strength measures.
- It minimized the damage caused by the earthquake in March 2022

	February 13, 2021 "Offshore Fukushima Prefecture Earthquake"	March 16, 2022 "Offshore Fukushima Prefecture Earthquake"
Magnitude	7.3	7.4
Seismic intensity (Iwanuma City)	Less than 6	Less than 6
Major Impact (Iwanuma Plant)	All production facilities stopped. It took three and a half months before all machine operations resumed.	All production facilities stopped. It took one month to resume operation of all machines.



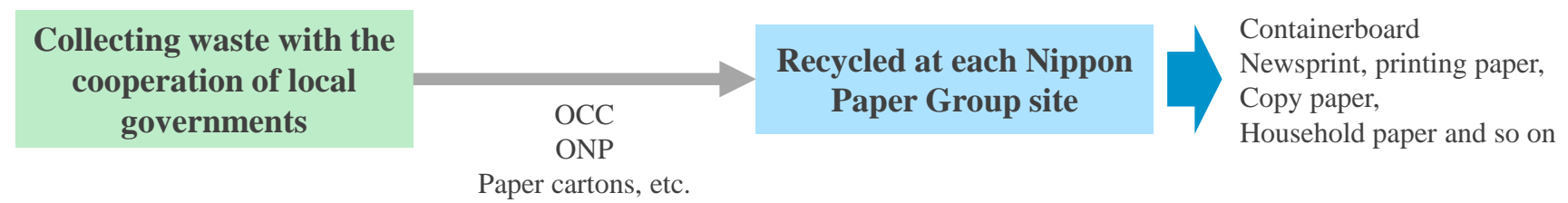
Continue to promote initiatives to ensure a stable product supply.

5. Strengthen sustainability management

Recycling

◆ Waste paper recycling system

- Aiming for stable resource procurement over the long term and the establishment of a comprehensive wastepaper recycling system through cooperation with the government authorities.



◆ Recycling business for waste paper containers

- Installing a recycling facility for food and beverage paper containers at the Fuji Mill of Nippon Paper Industries (Start operation in September 2022)
- Recycling waste paper containers in Hamamatsu City (demonstration tests)



- Promoting the establishment of a separation and collection scheme for paper cups and liquid packaging products
- Aiming for stable collection and use of annual 12,000 tonnes of waste paper containers by 2030

5. Strengthen sustainability management

Securing and utilizing human resources

◆ Allocating staffs to growing businesses and new businesses

- Utilize human resources in the paper and paperboard business with high operating skills
Achieve early and stable operations in case of business start-up and mass production
- Developing human resources with an eye to strengthen overseas business

◆ Securing personnel for operations and subcontractors

- Take advantage of highly experienced senior employees
- Introduce a shift work system that contributes to improving the ease of working

◆ Enhancing Engagement

- Introduce working rules that realizes flexible work styles such as balancing childcare, nursing care, and work
- Studying and introducing new systems to enhance job satisfaction such as an in-house side-work system



Realize better working environment where diverse employees can maximize their abilities, and secure, develop, and utilize good employees under the negative circumstance where the domestic working-age population continues to decline.

Our capital strategy (Capital allocation)

- Establish business structure generating a stable EBITDA of ¥100.0 billion in an early stage
- Priority is CAPEX in growing businesses
- Accelerate reduction of Cross-Shareholdings and sale of idle assets

■ Strategic CAPEX

- Continue to invest intensively in growing businesses while carefully selecting
- GHG reduction CAPEX are implemented immediately

■ Maintenance and renewal of production facilities

- Reduce as much as possible while focusing on BCP

■ Maintenance of financial discipline

- Promote asset sales and maintain financial discipline targets

■ Dividend

- As the earnings forecast for FY2023/3 has not yet been determined, the dividend forecast for FY2023/3 has not been determined as well
- Disclose dividend forecasts as soon as they become available



The Nippon Paper Group aims to contribute to better living and cultural progress everywhere it does business.

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