

Rengo Group's Initiatives

Management Conference on November 22, 2024,
Rengo Co., Ltd.



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Financial results for 2Q FY3/2025 and business environment

Financial results for 2Q

	(Billion yen)		
	2Q24 Forecast	2Q24 Results	Diff.
Net sales	500.0	495.1	-4.9
Operating profit	21.0	19.8	-1.2
Ordinary profit	22.0	21.9	-0.1
Profit attributable to owners of parent	17.0	18.9	-1.9

Summary

- ✓ Net sales nearly met the forecast at the beginning of the fiscal year, supported by contributions from the new consolidations, including RM TOHCELLO and the impact of the yen depreciation on foreign currency-denominated sales.
- ✓ Operating profit fell short of the forecast, due to moderate demand recovery in addition to the increased fixed costs and rising raw material prices.
- ✓ Profit attributable to owners of parent exceeded the forecast, driven by the recording of negative goodwill gains associated with the new consolidation of RM TOHCELLO.

Business environment



Corrugated packaging

- In spite of solid demand across a wide range of sectors, it did not meet the expectations
- While the cost reduction effects exceeded expectations, additional costs increased due to inflation



Flexible packaging

- + Demand related to inbound tourism and events has recovered
- Transient costs of new consolidation



Heavy Duty Packaging

- + Industrial resin products performed well
- Sluggish demand for petrochemical-related products



Overseas

- + New consolidation (including Concept Packaging Group in the U.S.)
- + Receiving of production transfer of flexible packaging from Japan
- Decline in profitability of heavy duty packaging business due to the economic downturn in Europe

Financial results for 2Q FY3/2025 and business environment

FY3/2025 forecast

Paperboard and Packaging Related Business

Composition ratio of net sales (1H/FY2024) **52%**



(The breakdown of factors influencing changes in operating profit trends compared to the forecasts at the beginning of the fiscal year)

Factors	Forecast
Volume	Despite corrugated board production volume (full-year) was expected to increase by 3.0% year-on-year, it had a slow start with an increase of only 0.2% in the first half.
Price	While the contribution from price revisions is expected to gradually reflect from the second half, there is also a possibility of delays in the timing of the revisions and changes in product sales mix.
Raw materials	The price of OCC in the first half was approximately one yen/kg higher than expected, and it is anticipated to remain firm in the second half as well.
Energy cost	In spite of benefits from the decline in crude oil prices, they are offset by the disadvantages of the yen depreciation, resulting in performance as expected. (Crude oil price sensitivity) Annual operating profit is affected by 0.2 billion yen per US\$/bbl. with approximately a six-month time lag for the impact to appear. (FX rate sensitivity) Annual operating profit is affected by 0.2 billion yen per yen/US\$.
Fixed costs and depreciation/amortization	While the increase in personnel expenses and depreciation/amortization costs was as expected, other expenses exceeded expectations due to the impact of inflation.
Cost reduction	Including improvements in the unit cost of paper production, cost reduction effects contributed more than expected over the full year.

Flexible Packaging-Related Business

Composition ratio of net sales (1H/FY2024) **18%**



The negative impact of acquisition-related costs for the new consolidation (RM TOHCELLO) is passing, working to recover from the slow start.

Heavy Duty Packaging-Related Business

Composition ratio of net sales (1H/FY2024) **5%**



Although there are concerns about reduced demand for petrochemical-related products and rising fixed costs, industrial resin products are performing well.

Overseas Business

Composition ratio of net sales (1H/FY2024) **22%**



Concerns about the prolonged impact of the economic downturn, particularly in Germany, are being offset by strong performance in flexible packaging and new consolidations in heavy duty packaging business.

Other Businesses

Composition ratio of net sales (1H/FY2024) **3%**

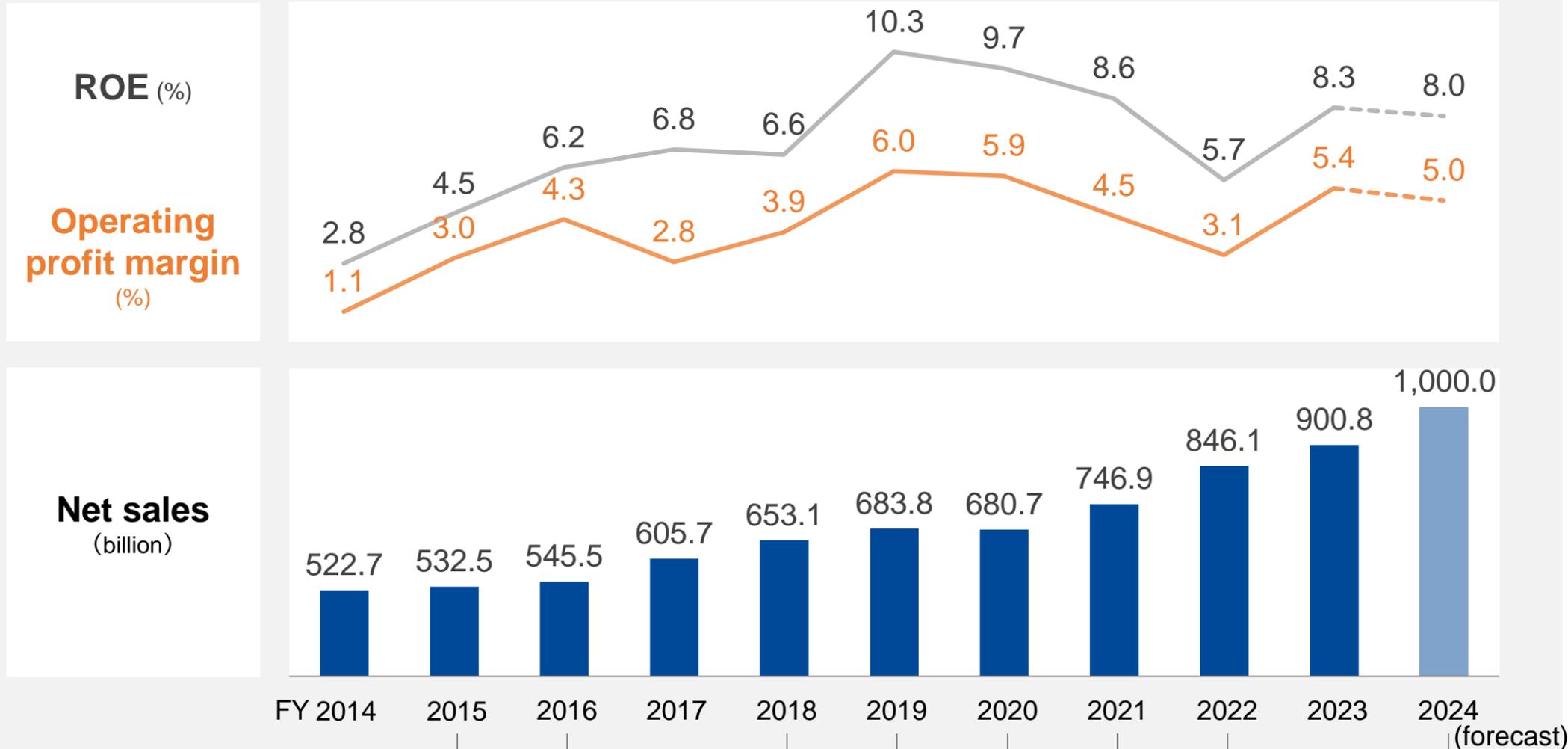


In the transportation business, despite the increase in fixed costs, a trend of increased profits is maintained by the revision of freight.

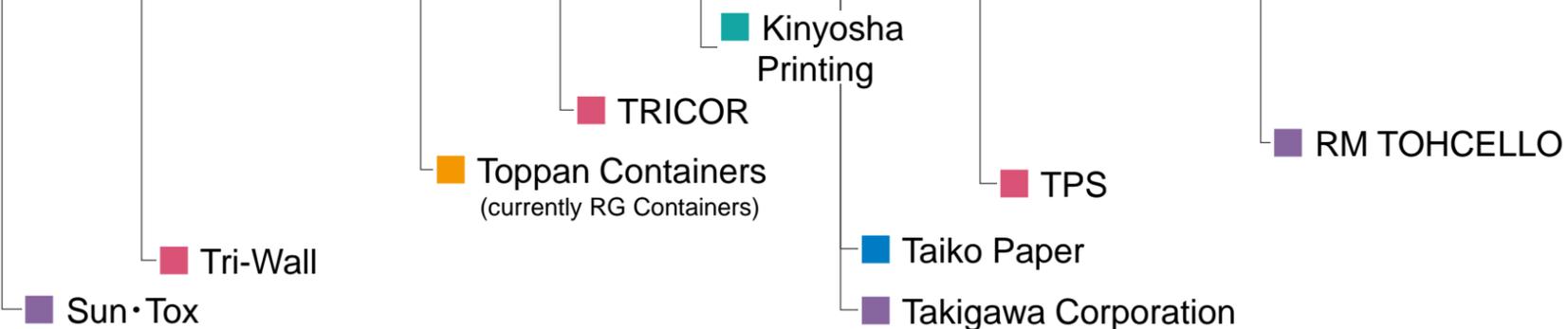
In the Final Year of Vision115

Performance history

More progress of post-merger integration for companies integrated into the group, contributing more to consolidated performance



Major M&As



Packaging Provider



Strategic theme

Ensuring the desirable scale and profitability for each core business within our [hexagonal business structure](#)

Next vision

Currently formulating the next vision for the period from FY2025 to FY2029, with the aim of a public announcement

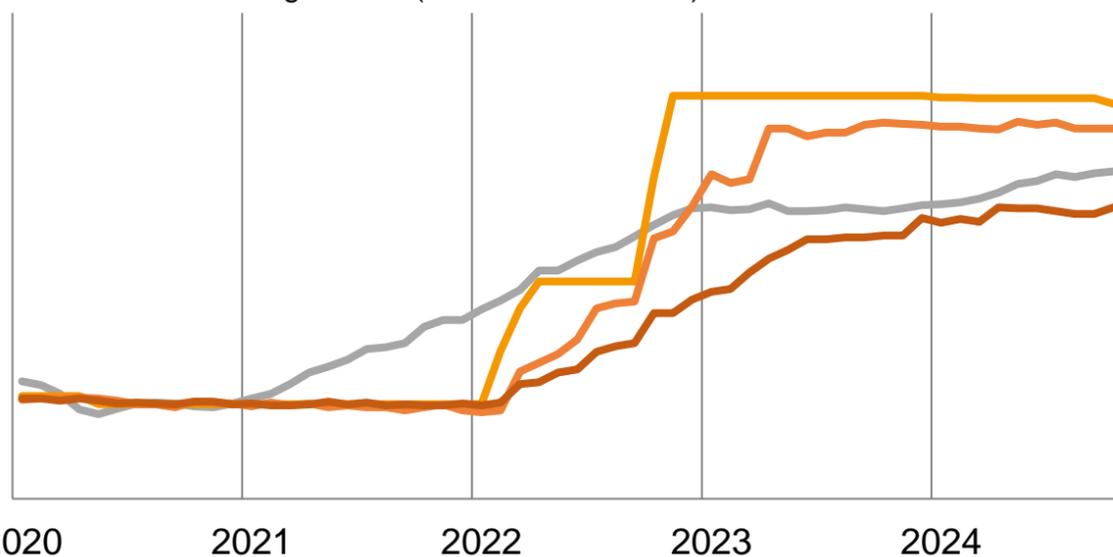
Hexagonal Business: Price revision (Paperboard and Packaging-Related Business)

*CGPI: Corporate Goods Price Index

Changes in the CGPI*

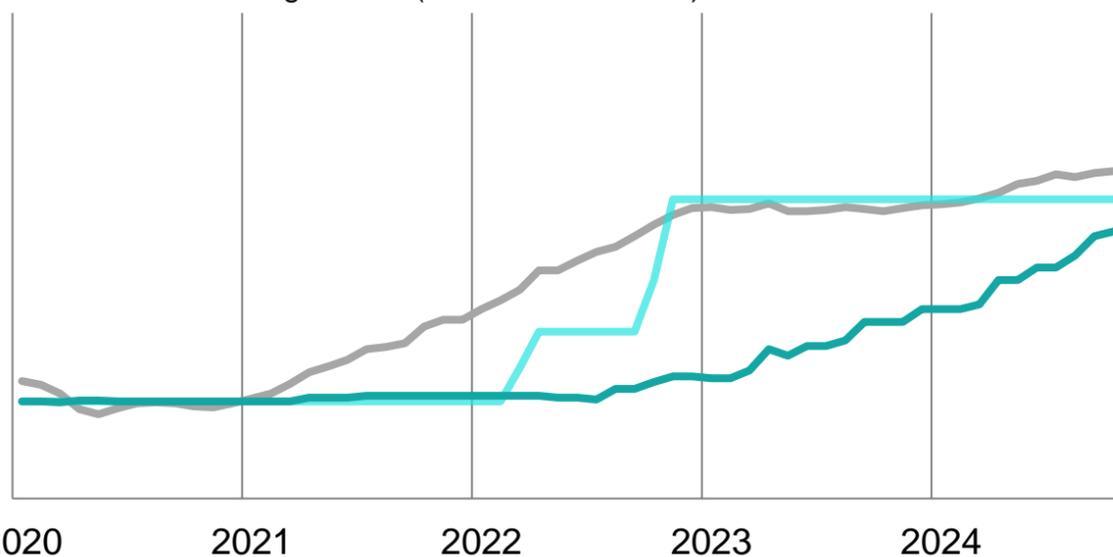
Promoting revision of package product prices for finalization within the year
Enhancing sales activities with increased awareness of pricing importance

2020 Overall Average = 100 (as of October 2024)



Containerboard 130.7
(Weighted average as Linerboard : corrugating medium = 6:4)
Corrugated board 128.1
Total average 123.7
Corrugated box 120.0

2020 Overall Average = 100 (as of October 2024)



Total average 123.7
Boxboard 120.8
Folding carton* 117.5
*Equivalent to "paper box" in the CGPI-adopted items

Source: Bank of Japan



Background of initiatives

- Raw material and fuel prices remaining high
- Rising logistics costs
- Rising labor costs due to continuous wage increases
- Environmental measures and capital investments to improve working environment
- Accepting requests from subcontracting companies to revise prices in accordance with their cost increases or wage increases

Concrete initiatives and objectives

Corrugated Packaging and Folding Carton

Announcement date	March 1, 2024
Start date (based on announcement)	April 1, 2024
Extent of price revision	More than 10%

Coated board

Announcement date	November 18, 2024
Start date (based on announcement)	January 1, 2025
Extent of price revision	More than 10%

- Explaining the background individually to clients and gaining their understanding after the announcement
- Negotiating delivery conditions, including the timing and extent of price revisions, taking into account clients' budget constraints
- Aiming to achieve a virtuous cycle of growth and distribution by addressing changes in the cost structure across the entire value chain

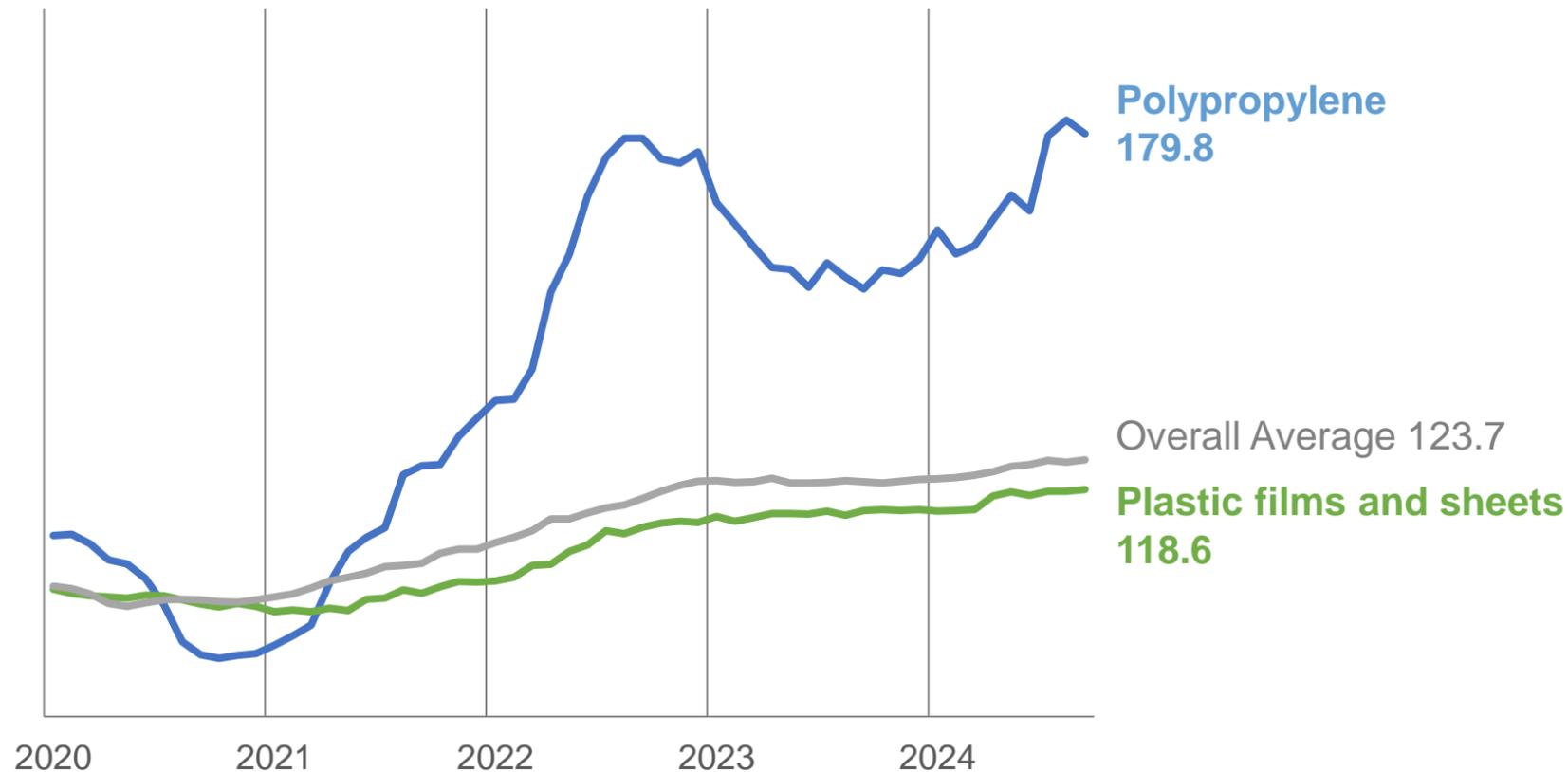
Hexagonal Business: Price revision (Flexible Packaging-Related Business)

Changes in the CGPI*

Recently, various costs beyond naphtha have increased

*CGPI: Corporate Goods Price Index

2020 average = 100 (figures as of October 2024)



Source: Bank of Japan



Background of initiatives

- Increasing geopolitical risks
- Prolonged yen depreciation
- Rising logistics costs
- Rising labor costs due to continuous wage increases
- Rising prices of naphtha and resins

Concrete initiatives and objectives

- Passing on cost increases from films to products
- Aiming to achieve a virtuous cycle of growth and distribution by responding to changes in the cost structure across the entire value chain

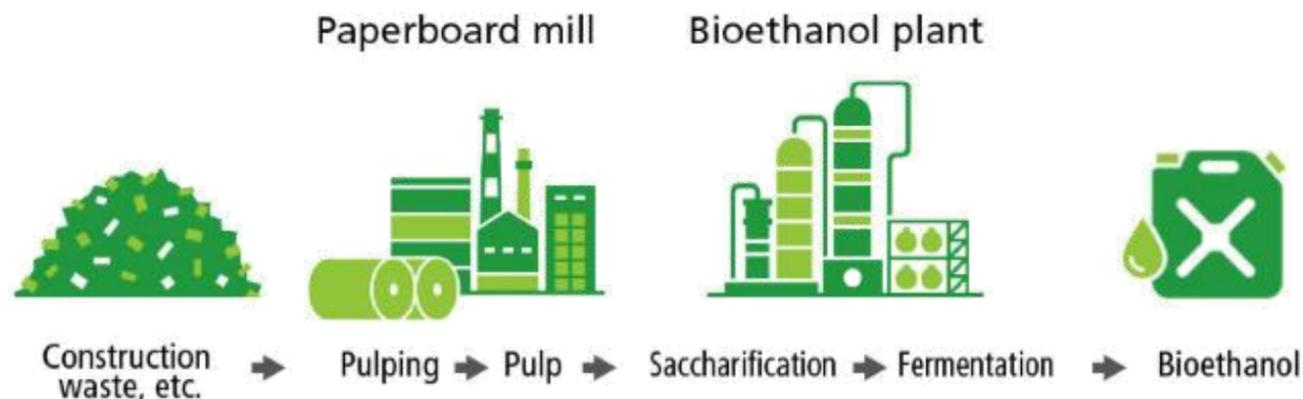
Hexagonal Business: Investments for additional corporate value creation

Demonstration Project for Second-Generation Bioethanol Production at Taiko Paper Mfg., Ltd.

Overview

- Utilizing the pulp production facilities of Taiko Paper Mfg. (Fuji City, Shizuoka Prefecture) and the biotechnology of Biomaterial in Tokyo (Onojo City, Fukuoka Prefecture), and with support from the New Energy and Industrial Technology Development Organization (NEDO), we aim for the commercial production and business development of second-generation bioethanol.

Process of the project



- At Taiko Paper Mfg., in parallel, the aging No. 1 and No. 2 paper machines (specialty paper, kraft paper) will be shut down, and production will be consolidated onto the No. 5 and No. 6 paper machines (kraft paper, etc.).
- Plans are also in place to develop environmentally friendly packaging using kraft paper and to expand the use of Taiko Paper's kraft paper in flexible packaging.

Timeline

Year/Month	Initiatives
February 2024	Details of the commission and grants from NEDO finalized and followed by commencement of the demonstration project.
April 2024	Make Biomaterial in Tokyo Co., Ltd. a subsidiary.
From FY2027 onwards	Commence commercial production (expected), with a target production volume of 20,000 kL per year.

Overview of Taiko Paper Mfg., Ltd.



Location	10 Kamiyokowari, Fuji-shi, Shizuoka Prefecture
Established	1950
Main business	Manufacturing and sales of kraft pulp, kraft paper, and specialty paper, and recycling

Overview of Biomaterial in Tokyo Co., Ltd.

Location	1-3-22, Kawakubo, Onojo-shi, Fukuoka Prefecture
Established	2006
Main business	Technological development, manufacturing of products, and consulting business related to biomass

Hexagonal Business: Investments for additional corporate value creation

Opening of Howa Sangyo Co., Ltd. R&D Center



Overview

- Acquired a new 1,028m² plot of land adjacent to the company's Narashino Plant (Funabashi-shi, Chiba Pref.) and constructed an R&D center.
- The center is open to development staff from various Rengo Group companies specializing in flexible packaging, further accelerating the development of environmentally friendly products.
- Construction Completed in October 2024.

Renovation of Rengo Takefu Plant



Overview

- The aging cellophane manufacturing equipment at Rengo's Takefu Plant (Echizen-shi, Fukui Pref.) will be sequentially updated to improve quality, and an additional film-forming machine will be installed.
- This renovation aims to meet the increasing demand for biodegradable materials from an environmental perspective.
- The new film-forming machine is scheduled to begin commercial operation in January 2028.

Hexagonal Business: Strengthening development capabilities through an integrated system

Promotion of post-merger integration of RM TOHCELLO

- In April 2024, the packaging solution businesses of Sun·Tox and Mitsui Chemicals Tohcello merged, and a new company, RM TOHCELLO, was established.
- As a frontrunner in polyolefin films and foam sheets, the company aims to enhance the in-house supply system and strengthen its development capabilities.
- Demonstrating leadership as a package provider in the advancement of the circular economy in packaging.



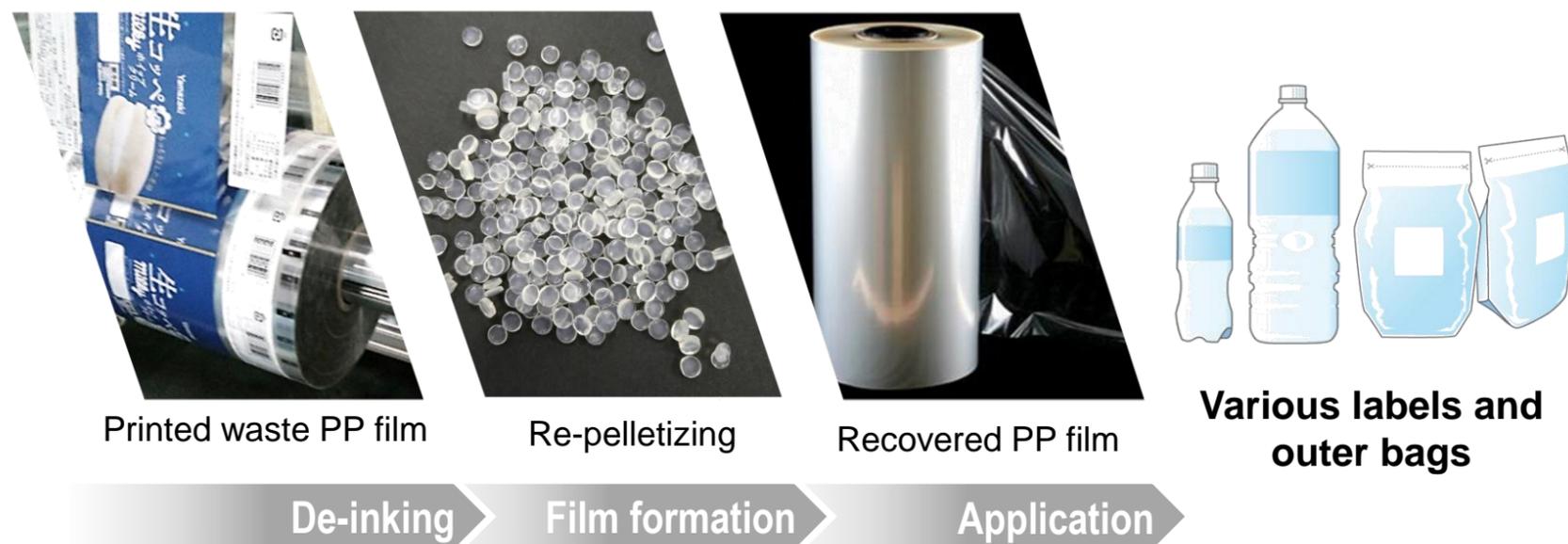
Overview of RM TOHCELLO CO., LTD.

Head Office Location	7 Kanda Mitoshiro-cho, Chiyoda-ku, Tokyo
Established	1929
Main businesses	Manufacturing and sales of plastic films and foam-molded sheets used for food, beverages, daily necessities, and packaging materials

Collaboration between Rengo, RM TOHCELLO, and Howa Sangyo

Material recycling of printed waste PP films

- Promoting the development of technology to de-ink and material recycle waste PP film.



Development of monomaterial OPP film

- RM TOHCELLO, Howa Sangyo, and Rengo are collaborating to newly develop monomaterial* films.
- Promoting these as environmentally friendly products targeting food and beverage applications.

* Monomaterial
Refers to “single material,” which has been gaining attention in recent years as it can expand recycling options for plastic products.



Hexagonal Business: Strengthening the foundation of existing businesses

Major capital investments

Promoting investments to improve the working environment for employees, including measures to address the increasingly hot summers year by year

Renovation of Rengo's directly operated corrugated plants

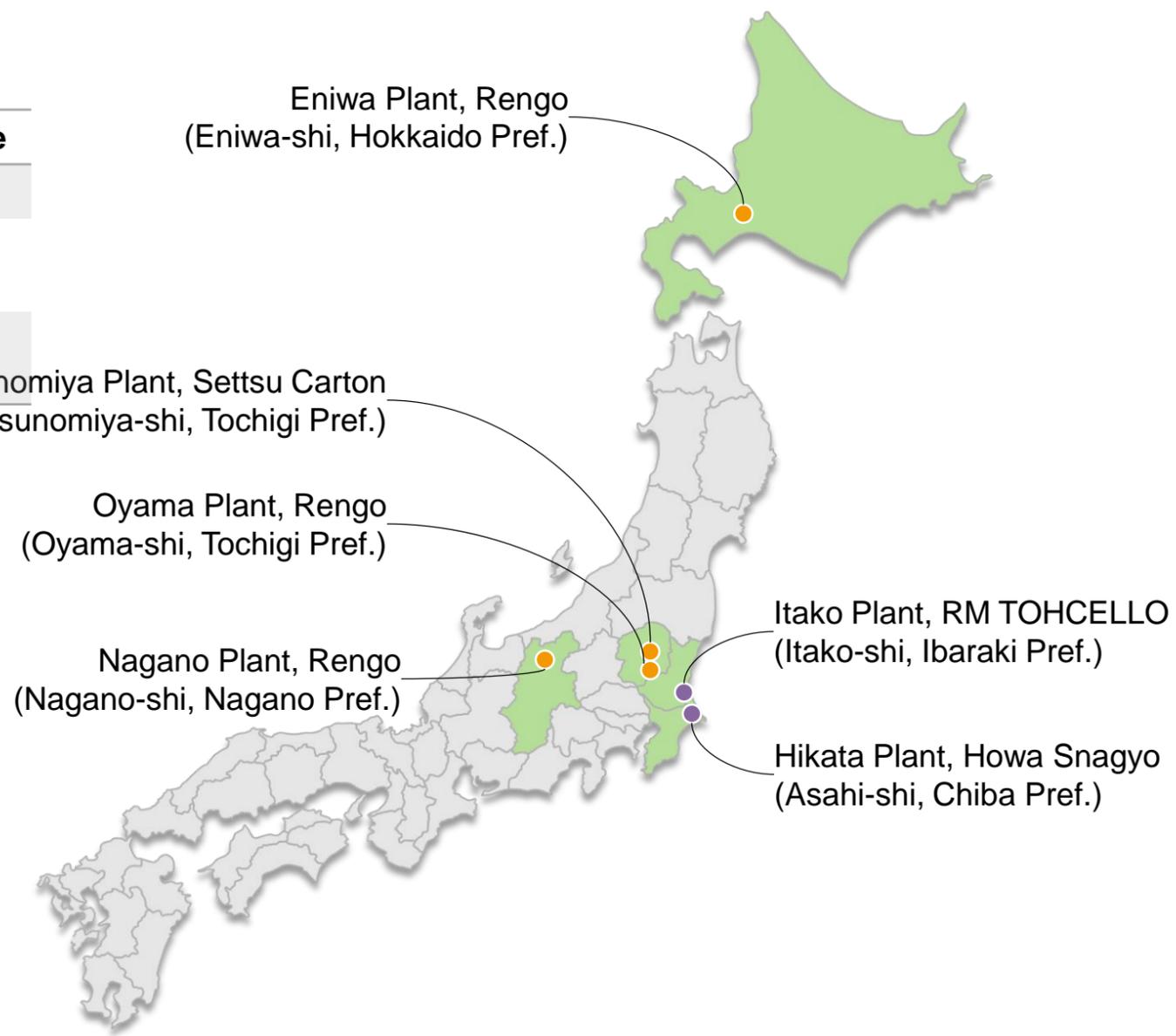
Plants	Locations	Details of investments	Completion date
● Eniwa Plant	Eniwa-shi, Hokkaido Pref.	Expansion of containerboard warehouse	December 2024
● Oyama Plant	Oyama-shi, Tochigi Pref.	Expansion of warehouse and enhancement of production facilities	January 2025
● Nagano Plant	Nagano-shi, Nagano Pref.	Expansion of warehouse and renovation of office building	February 2025

Equipment upgrades at flexible packaging factories

Plants	Locations	Details of investments	Completion date
● Itako Plant, RM TOHCELLO	Itako-shi, Ibaraki Pref.	Upgrade of the OP5 machine for its film recovery process	April 2024
● Hikata Plant, Howa Sangyo	Asahi-shi, Chiba Pref.	Upgrade of the gravure printing machine	April 2024

Equipment upgrades at the Group's corrugated plants

Plants	Locations	Details of investments	Completion date
● Utsunomiya Plant, Settsu Carton	Shimotsuke-shi, Tochigi Pref.	Speed enhancement modifications for the corrugator	May 2024



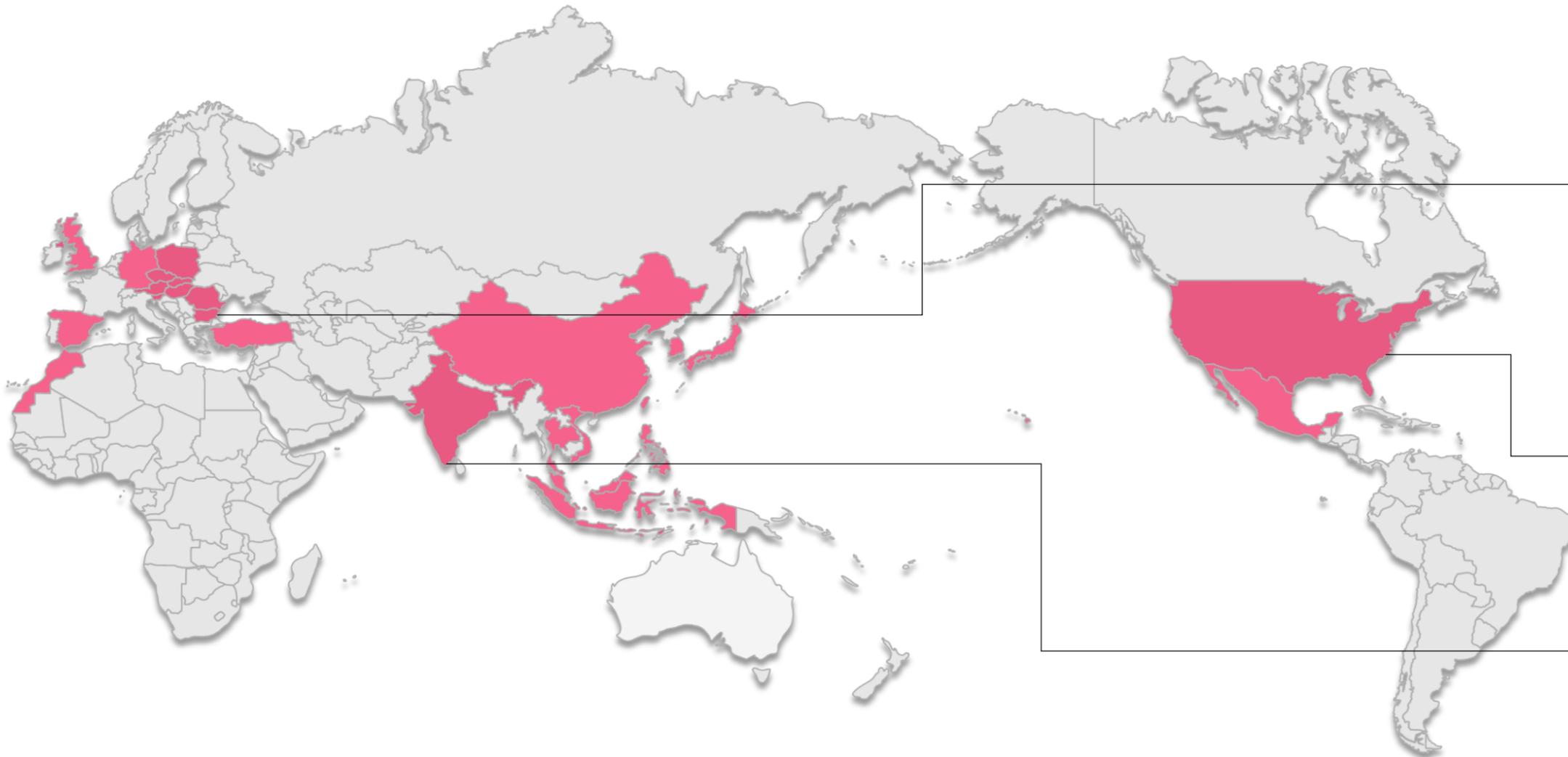
Hexagonal Business: Investments in growth markets

Challenges and initiatives for expanding and improving profitability in overseas businesses

- Developing new businesses as driving forces for future growth
- Expanding transactions and promoting localization through effective utilization of existing domestic and international networks
- Reviewing resource allocation with the key concept of “selection and concentration”
- Developing human resources in response to global opportunities

Overseas group companies with

208 plants and **52** locations
(As of the end of September 2024)



Major Initiatives for FY2024

Eastern Europe

TW Bulgaria

- Planning to establish a new corrugated plant, with operations starting in May 2026
- Supply sheets and boxes to surrounding fabricators such as Tri-Wall Turkey and Tri-Wall Romania

North America

Concept Packaging

- Tri-Wall acquired a stake in the company (August 2024)

India

Velvin Rengo Containers

- New plant fully started operations (September 2024)

Promoting environmental management: Reducing GHG emissions

Major Investments for GHG Emission Reductions

Completion (planned) year	Bases/equipment	Possible reduction amount (tons)	Investment amount (billion yen)
2023	Biomass boiler, Tonegawa Div., Rengo	9,000	3.5
2024	No.5 machine modification, Taiko Paper Mfg.	20,000	6.5
2025	Fuel conversion from coal to LNG, Kanazu Mill, Rengo	130,000	9.5
2026	No.2 biomass boiler, Yashio Mill, Rengo	25,000	9.0
	Fuel conversion from coal to LNG, Marusan Paper Mfg.	48,000	9.5
2027	Bioethanol production equipment, Taiko Paper Mfg.	9,000	15.5

Purpose of the Initiative

Turning GHG emission reductions into enhanced competitive advantage and market opportunities



Construction Progress at Kanazu Mill (September 2024)

Achieving Zero Coal Usage
(Fuel Conversion to LNG)

2026

Kanazu Mill, Rengo

2027

Marusan Paper Mfg.

CO₂ Emission Reduction Target

FY2030

compared to FY2013

46% reduction

SBT Certification Obtained

Promoting environmental management: Reducing GHG emissions

Background of the Initiative

SBT Certification

TCFD Disclosure

Paris Agreement

The need for comparable and accurate measurement of GHG emissions

SSBJ's Disclosure Standards

2050 Net Zero

Scope 1

Scope 3

Scope 2

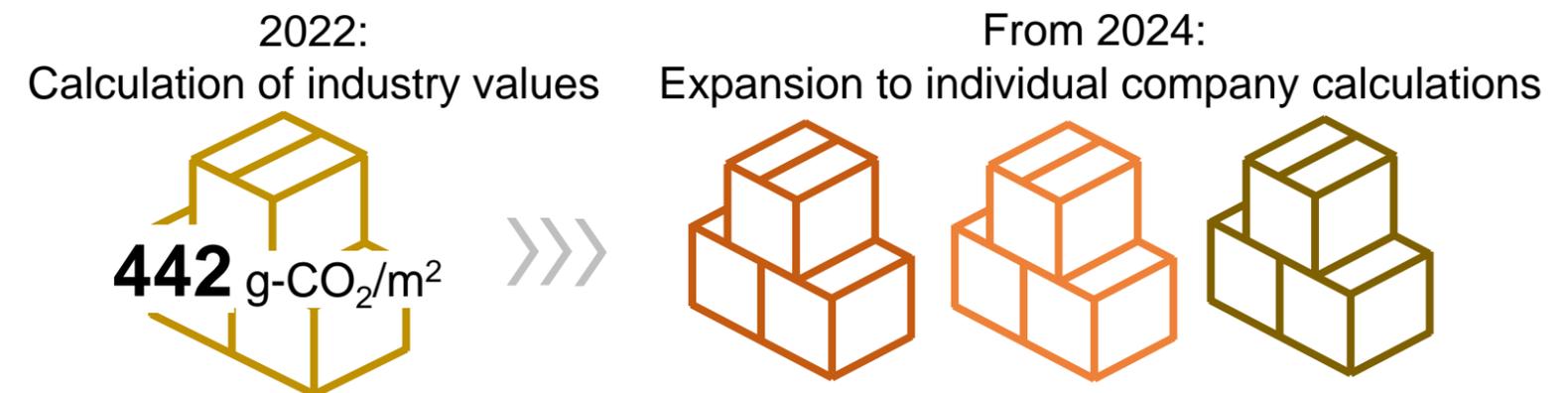
Specific Initiatives

Commencement of formulating the CFP Calculation Rules of corrugated packaging

The Japan Corrugated Case Association has begun formulating rules to enable each corrugated company to calculate their CFP emissions.

* CFP (carbon foot print)

A measure that expresses the amount of greenhouse gas emissions, converted to CO₂, produced throughout the entire lifecycle of a product or service.



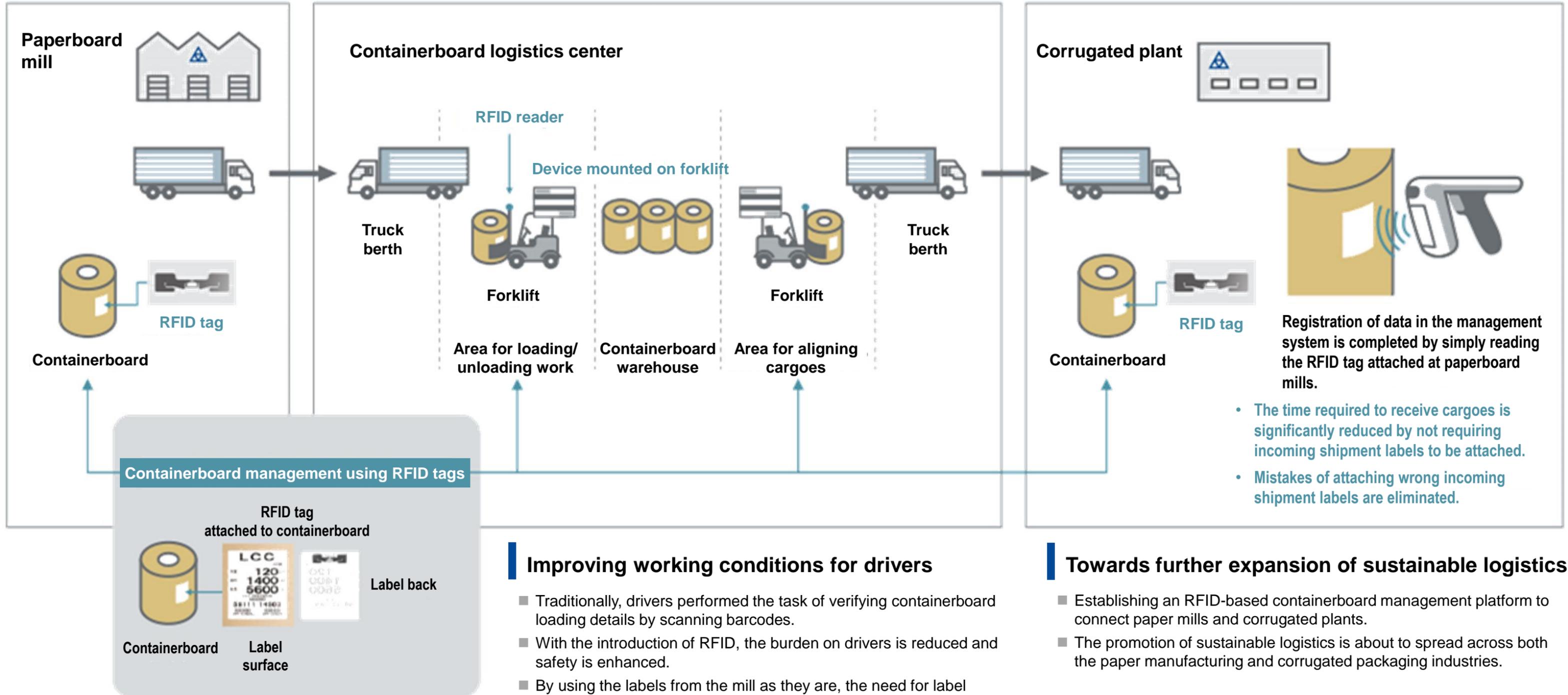
Joint demonstration experiment for the Primary Data Distribution Platform

Participating in a cross-industry demonstration experiment to distribute primary data necessary for calculating GHG emissions on a common platform, promoting the reduction of GHG emissions through GX and DX.

Promoting DX: New developments in containerboard management with RFID

Overview of containerboard management with RFID at Rengo

Reducing the burden on drivers and enhancing safety, while promoting sustainable logistics across both the paper manufacturing and corrugated packaging industries



Promoting SX: New expansion in total solutions for e-commerce

S-DEC (Smart Digital EC)

Rengo's Total Solutions: In addition to hardware aspects such as packaging materials and packaging machinery, we also support software aspects such as operational efficiency, maintenance, design, planning, and promotion, thereby streamlining our customers' e-commerce operations.



Front-end Operations (Marketing)



Back-end Operations (Fulfillment)



Support through design innovations for shipping cases and a lineup of semi-automatic machines



Product development planning by our Design Marketing Center and sales promotion through digital printing package for e-commerce



Solutions that contribute to solving social issues through the consolidation and optimization of materials, as well as the reduction of environmental impact

Supporting the SX of e-commerce logistics

Enhancing competitiveness and achieving sustainable growth by promoting Sustainability Transformation (SX) in growing markets

Social contribution: Integrating marine conservation and prosperity

Blue Ocean Initiative activities

Our company is participating in the activities of the Blue Ocean Initiative (BOI), a general incorporated association that started in April 2023, aiming to integrating marine conservation and prosperity.

At BOI, there are plans for various activity programs, including a booth exhibition within the "Blue Ocean" pavilion at the 2025 Japan International Exposition (Osaka-Kansai Expo), as well as discussions and concrete actions involving industry, government, academia, and civil society on topics such as marine conservation and the utilization of marine resources.

By participating in BOI's activities, we aim to achieve an integration between marine conservation and prosperity through co-creation with even more partners.



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We will provide tube board for the Dome C of the "BLUE OCEAN DOME" to be exhibited by the specified non-profit organization ZERI JAPAN at the 2025 Japan International Exposition (Osaka-Kansai Expo).

Towards enhancing corporate value

Vision115 (2020-2024)

Packaging Provider

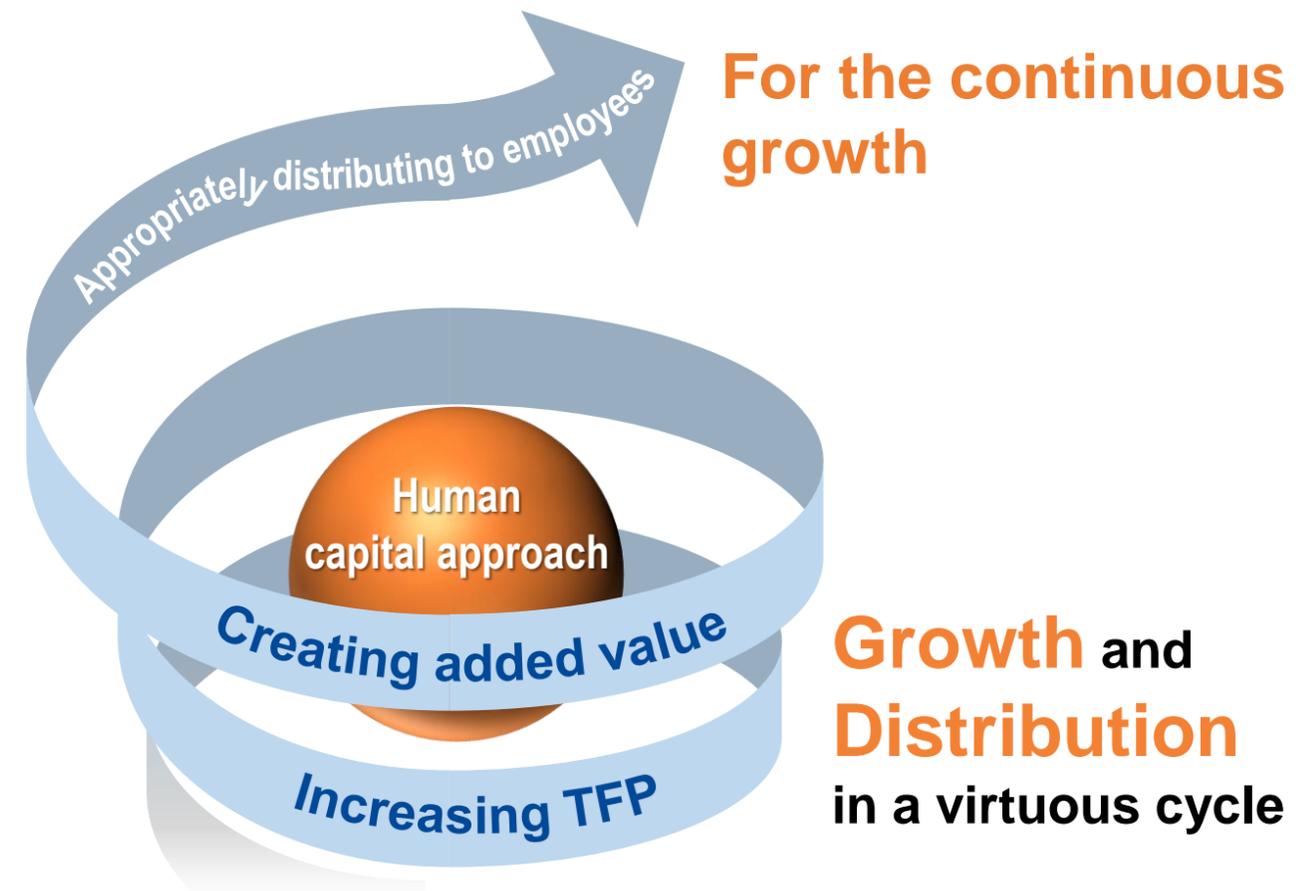


Vision115

(Ending FY2024)

The World's Best
General Packaging
Manufacturer Group

Achieving virtuous cycle of growth and distribution



With the aim of becoming the world's best general packaging manufacturer group as a “packaging provider,” toward achieving the Vision 115 medium term vision ending in FY2024 which marks the 115th anniversary of the Company's founding, we are striving to ensure the desirable scale and profitability for each core business within our hexagonal business structure.

With the human capital approach—human centered approach—as the pillar of our corporate management, we will continuously achieve a “virtuous cycle of growth and distribution” with a linkage of increased total factor productivity and the next stage of growth through appropriate distribution to employees.



“The **best** packaging provider
in the **world**”



Nakanoshima Central Tower 25-27F, 2-2-7
Nakanoshima, Kita-ku, Osaka, Japan 530-0005

Email: ir@rengo.co.jp

<https://www.rengo.co.jp/english/>