

The Third Medium-term Business Plan (April 2018 \sim March 2021)

Move on: **Reform and Soar Above**

May 31, 2018

Notes regarding figures and expressions:

- 1. Amounts are rounded off to the nearest 0.1 billion yen; totals may not sum due to rounding.
- 2. Fiscal year (FY) represents the 1-year period from Apr 1 to Mar 31. (FY2018 is the fiscal year from Apr 1, 2018 to Mar 31, 2019.)

Disclaimers regarding translation:

- 1. This document is an English translation of the original Japanese document dated May 31, 2018 and is only for reference purposes. In the event of any discrepancy between the original Japanese document and this translated document, the Japanese document shall prevail.
- 2. Translations of brand names and product names not yet launched in English-speaking regions are not official and are subject to change without notice.

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- (3) Reform of working styles

1. Overview of the Second Medium-term Business Plan



- Achieved net sales target through firm implementation of the principal strategies of the Second Medium-term Business Plan ("2nd MTBP")
- Fell short of other targets (such as ordinary income) due to changes in business environment, e.g. sharp increase in prices of raw materials

Principal business goals and results

(billions of yen)	2 nd MTBP goals	Results
Net sales	500	531.3
Ordinary income	25	12.8
Sales ratio	5 %	2.4 %
Net interest- bearing debt	Under 250	280
Equity ratio	28 %	25.9 %
Net D/E ratio	1.5	1.6
Exchange rate	113 JPY/USD	110.9 JPY/USD
Dubai crude oil	55 USD/barrel	56 USD/barre

Principal strategies

- Structural shifting of Paper business
- Strengthening Containerboard & **Corrugated Container business**
- Further growth and acceleration of Home & Personal Care business
- Thorough cost reduction
- Pursuing efficiency and diversity in human resource utilization
- Further improvement of financial strength

2. Daio Paper Group's vision



■ The Daio Paper Group aims to increase its corporate value sustainably in harmony with the environment and local communities by working towards resolving ESG issues through business activities based on its management philosophy

<Management philosophy>



corporate value in harmony with the society

global environment Sustainable increase in Creation of social value Environmental Contribute to recyclingoriented society by reducing environmental load Social Respond to declining birthrate and aging society, coexist in harmony with local communities Governance

<Business activities> **Business development** and growth strategies capitalizing on Daio's strengths Integrated manufacturer From newsprint to diapers **Unique management** strategy Thoroughly "Customer First" **Environmentally** conscious Recovered paper usage ratio of 64%

<ESG issues> Initiatives to tackle issues,

- G
- Establish sound governance structure to support sustainable growth

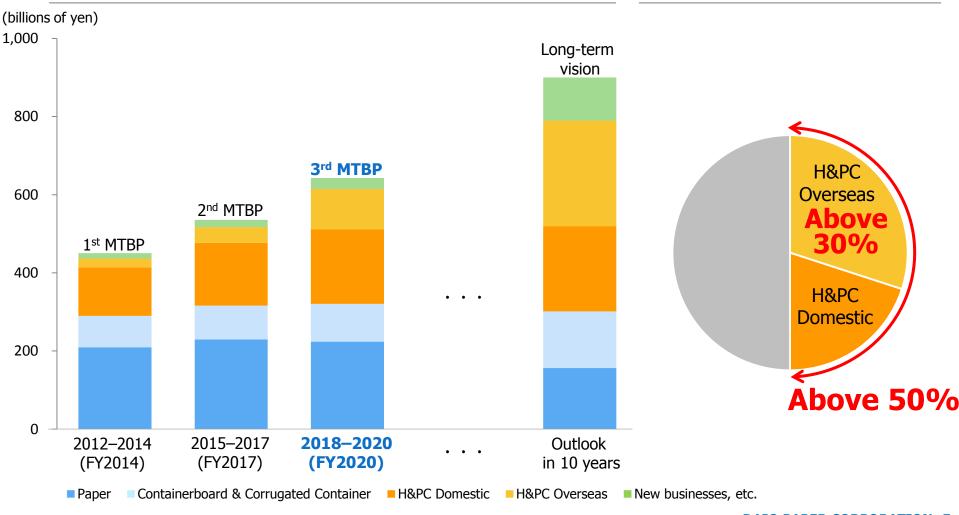
3. Strategic transformation of business portfolio



Strategically transform business portfolio and become a sustainable corporate group capable continuous growth

Net sales by segment

Net sales composition in 10 years (Outlook)



4. The Third Medium-term Business Plan (1) Numerical targets

1 Financial targets



	(billions of yen)	1 st MTBP (FY2014)	2 nd MTBP (FY2017)	3 rd MTBP (FY2020)	Long-term vision (Outlook in 10 years)
Net sales Operating income (Operating margin) H&PC overseas business net sales ratio ROE		450.2	531.3	635	800-1 tn yen
		21.8 (4.8 %)	11.1 (2.1%)	32 (5.0 %)	80–100 (10%)
		4.9 %	7.7 %	15%	Above 30 %
		10.0 %	2.2%	8%	Above 12%
Ne	t D/E ratio	1.9	1.6	1.6	Under 1.0
Ne	t D/E ratio Ordinary income (Ordinary margin)	1.9 21.8 (4.8 %)	1.6 12.8 (2.4 %)	28.5 (4.5 %)	Under 1.0
	Ordinary income	21.8	12.8	28.5	Under 1.0
Ne Reference	Ordinary income (Ordinary margin) CAPEX	21.8 (4.8 %)	12.8 (2.4 %)	28.5 (4.5 %)	Under 1.0
	Ordinary income (Ordinary margin) CAPEX (3-year cumulative) Depreciation	21.8 (4.8 %) 78.3 80.0	12.8 (2.4 %) 109.3	28.5 (4.5 %) 158.0 ^{×1}	Under 1.0
	Ordinary income (Ordinary margin) CAPEX (3-year cumulative) Depreciation (3-year cumulative)	21.8 (4.8 %) 78.3 80.0	12.8 (2.4%) 109.3 87.2	28.5 (4.5 %) 158.0 ^{**1} 105.8	

X1: Daio Paper plans to use own funds and debt financing (borrowings from financial institutions, bond issues) to fund CAPEX.

^{*2:} Daio Paper will mitigate impact to financial position through initiatives such as shortening of cash conversion cycle (from current 87 days to 77 days).





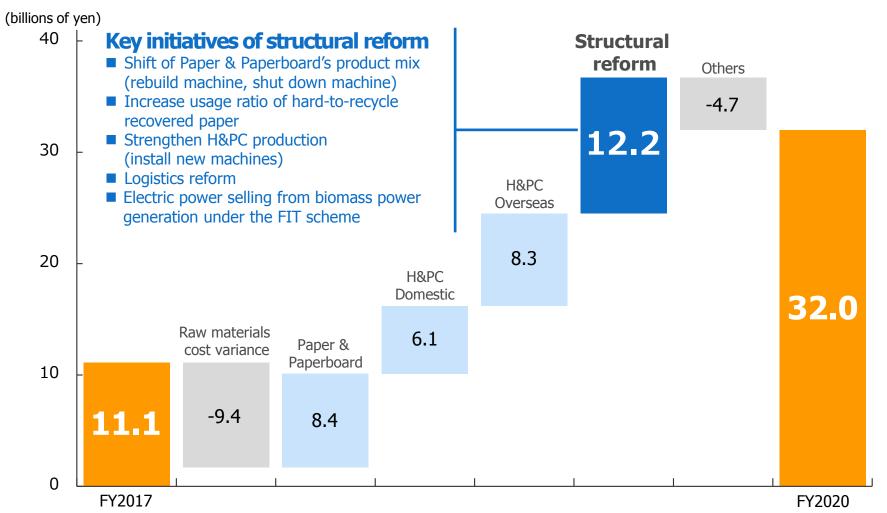
	2 nd MTBP (FY2017)			3 rd MTBP (FY2020) Targets		
Business segment	Net sales (bn yen)	OP income (bn yen)	OP margin	Net sales (bn yen)	OP income (bn yen)	OP margin
Paper & Paperboard	313.6	0.7	0.2%	320.0	10.0	3.1%
H&PC	197.0	8.1	4.1%	291.0	20.0	6.9%
(Breakdown) Overseas	41.1	-1.3	-	100.0	7.0	7.0%
Domestic	155.9	9.4	6.0%	191.0	13.0	6.8%
Other businesses (incl. adjustments)	20.8	2.3	11.1%	24.0	2.0	8.3%
Total	531.3	11.1	2.1%	635.0	32.0	5.0%

4. The Third Medium-term Business Plan (1) Numerical targets

3 Consolidated operating income improvement plan



■ Aim to achieve consolidated operating income of 32 bn yen (+20.9 bn yen from FY2017) in FY2020 by implementing initiatives centered on "structural reform", the main pillar of the growth strategy, during the 3rd MTBP



4 Capital expenditure

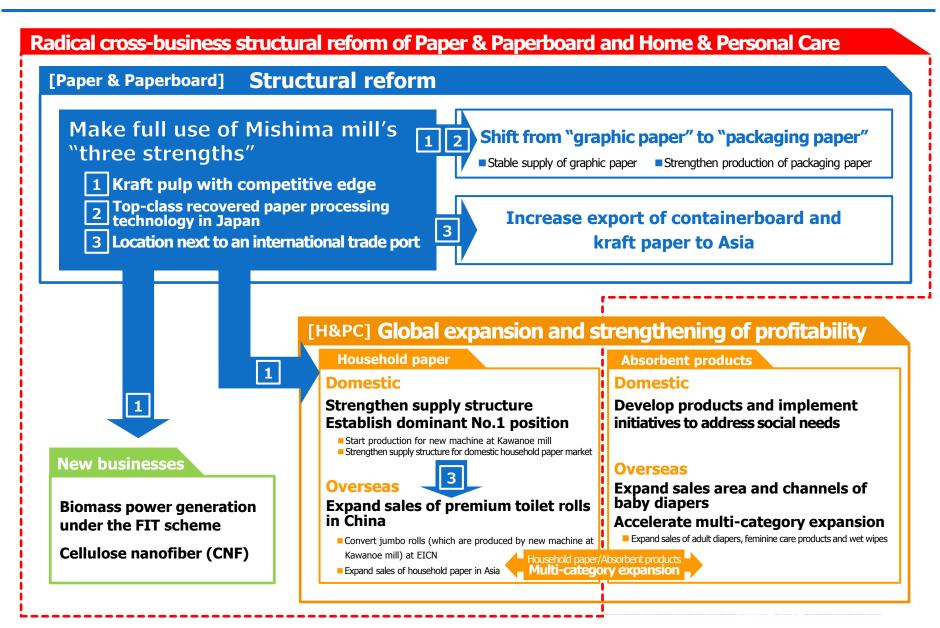


3-year cumulative CAPEX: 158 bn yen

Business	Category	CAPEX amount	Main objectives
Paper & Paperboard	Structural reform	37 bn yen	 Increase profit from transformation of production portfolio to adapt to structural changes in demand Reduce cost by increasing usage of hard-to-recycle recovered paper Increase profitability from kraft pulp production capacity increase
Н&РС	Growth & structural reform	52 bn yen	 [Domestic] "Quick delivery" to Tokyo metropolitan area, the largest source of final demand for household paper Expand sales of adult diapers (boost retail channel sales) Expand sales of feminine care products [Overseas] Start full-scale sales of premium toilet rolls with the export of jumbo rolls from Japan to China Strengthen supply structure of baby diapers Construct and start production at second factory in China to prepare for further business expansion
New businesses	FIT power generation, CNF	19 bn yen	 Secure stable earnings from power generation business under the feed-in tariff (FIT) scheme Early commercialization of CNF
IT investments	_	7 bn yen	Business process reform, DCM/SCM reform
Others	_	43 bn yen	Ordinary investments

4. The Third Medium-term Business Plan (2) Key strategies The big picture of the key strategies





(Ref) Location of Mishima mill and Kawanoe mill





Kawanoe mill, which is located beside Mishima mill, have pipes and power transmission lines connected to Mishima mill. As such, Mishima mill will supply highly cost competitive kraft pulp in slurry form, as well as energy such as steam and electric power to Kawanoe mill. The operations of Mishima mill and Kawanoe mill will be integrated.

1 Radical cross-business structural reform of Paper & Paperboard and Home & Personal Care (1)



Initiatives that capitalize on Mishima mill's three strengths

- Make full use of the three strengths of Mishima mill to establish Daio Paper's competitive advantage
- Kraft pulp with competitive edgeMaximize profit
 - Produces both softwood pulp (highest production volume in Japan) and hardwood pulp (second highest)
 - Locational advantage of coastal mill in the procurement of imported woodchips
 - Increase production capacity of kraft pulp
- Top-class recovered paper processing technology in Japan

 > Reduce cost by making effective use of hard-to-recycle recovered paper
 - Make full use of original automated sorting technology in the recovered paper processing process
 - Increase usage ratio of hard-to-recycle recovered paper
- Mishima mill's location next to an international trade port

 > Develop new markets
 - Export household paper, containerboard and kraft paper to Asian countries, where demand is particularly strong

Transform production portfolio

■ To prepare for the demand structure of the future, push forward the following two reforms to increase production of products that will drive growth:

<Paper & Paperboard>

1. Shift from "graphic paper" to "packaging paper"

<H&PC>

2. Strengthen production structure of household paper

1 Radical cross-business structural reform of Paper & Paperboard and Home & Personal Care (2)

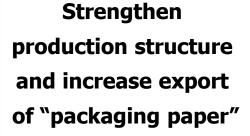


Paper & Paperboard: Shift from "graphic paper" to "packaging paper"

Maintain stable supply of "graphic paper" (e.g. newsprint, printing paper, business communication paper)

- Make effective use of Mishima mill's swing machine, and maintain stable supply structure
- Continue to promote close cooperation with members of the regional distributors' partnership "Sakura Terrace"
- Increase production efficiency and cost competitiveness to strengthen competitive advantage
- Strengthen production structure of containerboard
 - Rebuild Mishima mill's paper machine into a containerboard machine of leading production capacity in Japan (planned for Apr 2020)
 - Shift white top linerboard production from Taisei Paper to Mishima mill (planned for Apr 2020)
 - Shut down Taisei Paper's containerboard machine (planned for Apr

 –Jun 2020)
 - → Realize a containerboard "one-stop delivery" system (to deliver all types of containerboard in one shipment) at Mishima mill
 - Implement production adjustments for machine at Mishima: shift from production of containerboard and specialty kraft paper to production of kraft paper
 - Strengthen cost competitiveness by making effective use of hard-to-recycle recovered paper
- Capitalize on Mishima mill's locational advantage and expand export sales of paperboard and kraft paper to Asia, where demand is particularly strong





1 Radical cross-business structural reform of Paper & Paperboard and Home & Personal Care (3)



H&PC: Strengthen production structure of household paper

Start full-scale sales of premium toilet rolls in the Chinese market

- Export household paper jumbo rolls to Elleair International China (Nantong) ("EICN"), convert to premium toilet rolls at EICN to sell in the Chinese market
 - Install new toilet roll converting machine at EICN (Oct 2018)

Strengthen supply structure of household paper and establish position as the dominant No.1 in the domestic market

- Realize the optimal product mix to respond to market environment and meet consumer needs with the start-up of the new machine at Kawanoe mill
- Realize "quick delivery" of high value-added products to the Tokyo metropolitan area, the largest source of final demand
 - Install new household paper converting machine in Gyoda city, Saitama pref. (Oct 2018)
- Strengthen supply structure of high value-added products and accelerate nationwide distribution of the product brands acquired through M&A (Cotton Feel, Shower Toilet), etc.
- Install new household paper machine at Kani mill (planned for Apr 2020) to further strengthen supply structure for the domestic market, in light of the expansion of household paper exports which would lead to a shortage for the domestic market
- Install converting machines for wet tissues and others at Taisei Paper, of which containerboard machine is to be shut down, in order to turn it into a production factory dedicated to the H&PC business

2 Global expansion and strengthening of profitability of **Home & Personal Care (1) Household paper**



H&PC Household Paper Business Expansion

Overseas

Accelerate multi-category business expansion

- From Kawanoe mill to China (EICN) Start low-cost export of jumbo roll
- Install new converting machine at EICN Convert at and sell from EICN
- Capitalize on brand equity of baby diapers to **Develop toilet roll market**
- Increase sales of wet wipes and others in Thailand and other Southeast Asian countries **Expand product line-up**





Domestic

Strengthen supply structure and establish dominant No.1 in share

Start-up of Kawanoe mill's new machine and Improve production efficiency

> Install new household paper converting machine in Saitama prefecture

- "Quick delivery" to the Tokyo metropolitan area
- Strengthen supply structure of high value-added products **Expand sales and profit through** stable supply
- With the brands acquired through M&A **Accelerate synergy realization** with nationwide distribution









2 Global expansion and strengthening of profitability of **Home & Personal Care (2) Absorbent products**



H&PC Absorbent Products Business Expansion

Overseas

Expand sales area and channels, accelerate multi-category <u>business expansion</u>

- Install more baby diaper machines
 - **Expand sales of premium products**
- Develop products that meet each country's needs **Increase export sales**
- Proactively approach traditional trade shops and open up stores on EC platforms **Expand sales channels**
- Expand sales of feminine care products and adult diapers
- **Accelerate multi-category** business expansion









Domestic

Develop products and implement initiatives to address social needs

Strengthen connection between institutional diapers and diapers for retail consumers

Expand customer base of adult diapers for retail consumers

- Utilize Daio Paper's original app, provided through "Medical Care Station" (an SNS platform exclusive to medical and nursing care professionals), within the framework of the "Community-based Integrated Care Systems"
- Alleviate anxieties of active mid-lifers and elderly people
- **Increase sales of products for** light incontinence
- Product development that reflects users' voices Strengthen sales of baby diapers







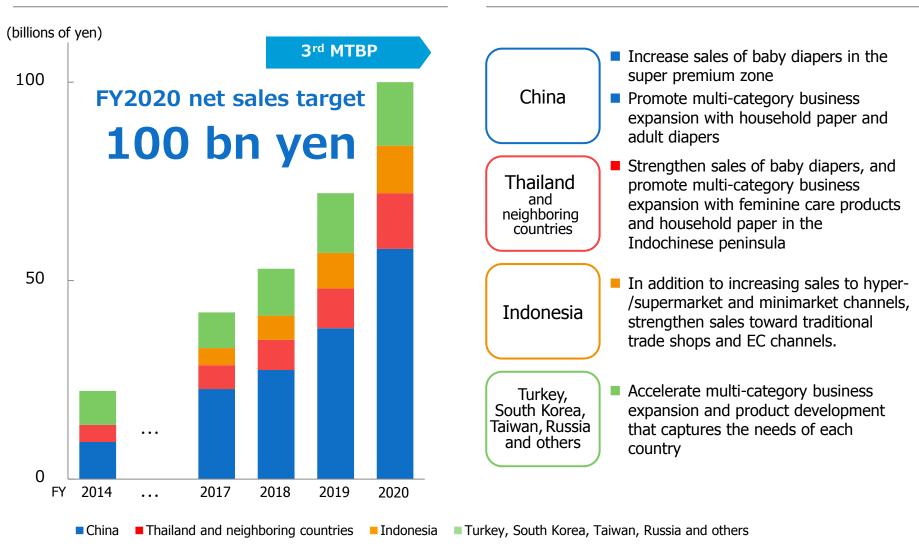


2 Global expansion and strengthening of profitability of **Home & Personal Care (3) Overseas initiatives**



Net sales by country/region

Initiatives by country/region



2 Global expansion and strengthening of profitability of **Home & Personal Care (4)Overseas initiatives**



China Construct and start operations of a second factory on the site beside existing factory

Multi-

category

expansion

Baby diapers

Further increase sales of super premium zone

- Expects market to continue growing in light of the end of the one-child policy and rising income level
- Increase sales of the super premium "Angel series" and the Made-in-Japan highest-grade "Guangyu series"
 - → Plan to install more baby diaper machines
- Strengthen tie-ups with major EC platforms

Adult diapers

Increase sales by expanding sales channels

Strengthen product proposal activities aimed at high-end elderly care facilities in Beijing and East China region, etc.

Household paper

Develop premium zone in household paper market

- Expects toilet paper market to expand on the back of the "Toilet Revolution"
- Install new household paper converting machine at Chinese factory (EICN) in Oct 2018
- Promote sales in the premium zone







4-ply premium toilet rolls



Premium toilet rolls displayed/sold in the same space as the Angel series and the Guangyu series

2 Global expansion and strengthening of profitability of **Home & Personal Care (5) Overseas initiatives**



Thailand and neighboring countries (Vietnam, Malaysia and others)

Increase sales of baby diapers and accelerate multi-category business expansion in each country in the Indochinese peninsula

- In addition to baby diapers, accelerate multi-category business expansion with feminine care products, wet wipes and related products, etc.
- Strengthen sales in each country in the Indochinese peninsula, which is experiencing remarkable economic growth
 - → Install more baby diaper machines

Indonesia

Further increase sales of baby diapers through expanding sales channels

- Expects domestic consumption to grow as Indonesia is a huge market with the fourth largest population in the world
 - → Install more baby diaper machines
- Strengthen sales to traditional trade shops (warung)
- Increase sales in the rapidly expanding EC market
- Consider construction of a second factory



Turkey

Established representative office and started sales of baby diapers in Sep 2017; begun considering the construction of a factory







South Korea, Taiwan, Russia and others

Develop products that meet the needs of each country and pursue further sales increase and multi-category business expansion in countries where export sales are conducted







- 4. The Third Medium-term Business Plan (2) Key strategies
 - **3 Logistics reform to support domestic growth of Home & Personal Care (start operations in Apr 2018)**



- Strengthen logistics function from the perspectives of both hardware and software, and improve efficiency of storage, distribution and cargo handling
- Strengthen supply structure as the top household paper manufacturer in Japan to support sales and profit growth

Large-scale logistics warehouse

Consolidate external warehouses into large-scale warehouses (Total floor area: approx. 175,000m²)

Consolidation increases storage efficiency

by **10**%

The increase in transportation capacity would reduce drivers' waiting and loading time



Chubu-kani: completed in Apr 2018 (Kani city, Gifu pref.) 27,588m²



Shikokuchuo: completed in May 2018 (Shikokuchuo city, Ehime pref.) 54,952m²



Fuji-kitayama: to be completed in Jun 2018 (Fujinomiya city, Shizuoka pref.)



Fuji-nanryo: to be completed in Jul 2018 (Fujinomiya city, Shizuoka pref.) 67,166m²

Shift to pallet distribution

Develop dedicated pallets, revise dimensions and number of cases per pallet

5% reduction in loading and unloading times

(Test operations of pallet distribution of household paper slated to start from Jun 2018)













4 Early commercialization of cellulose nanofiber (CNF)



Further expansion of CNF business

Ref: Target market size of CNF related materials (year 2030) 1 trillion ven

Source: METI

Functional products with Daio Paper's cellulose nanofiber

Speed up development of applications **Extensive application** development

Artificial bone graft material (Nov 2016)

Toilet cleaning wipes with CNF content "Kirekira!" <Improved wiping property and surface strength> (Launched Apr 2017, updated Oct 2017)

Cement-based materials

[Building material] (Prevent cracks, etc.)

Resin composite materials

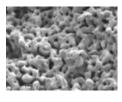
[Electric appliances] (Reduce weight, improve strength)

[Cosmetics]

Thickeners

[Paint, food] (Retain moisture, etc.) (Thicken, etc.) **Resin composite** materials

[Automobile parts] (Reduce weight, improve strength)















Establish supply structure for distribution of samples

Begin mass production

Expand supply, strengthen competitive advantage

Distribution of samples

Slurry





■ Make full use of the characteristics of ELLEX and speed up the development of applications

■Work on improving technology and begin mass production

[Characteristics of ELLEX]

- 1) High cost competitiveness
- 2 Variation in fiber size
- **3 Comprehensive pulp line-up**

Applications

3rd MTBP 2nd MTBP 4th MTBP \sim

5. Building the foundation for sustainable growth (1) ESG initiatives



Based on the management philosophy of "Shaping an abundant and affable future for the world", promote initiatives to address ESG issues through business activities

Category

Major initiatives

nvironmental

Contribute to recycling-oriented and sustainable society by reducing environmental load

- Commence biomass power generation under the FIT scheme (planned for Jul 2020)
- Promote transparent procurement of wood-based raw materials by ensuring traceability from logging to distribution
- Reduce amount of sewage sludge ash by recycling recovered paper deinking sludge into filler (chemical used in papermaking)
- Promote initiatives to reduce carbon dioxide emissions based on the "Daio Global Environment Charter": effectively use hard-to-recycle recovered paper, save energy, reduce waste, etc.
- Implement Environmental Accounting, and Material Flow Accounting to monitor the Group's contributions to the environment

Respond to declining birthrate and aging society, coexist in harmony with local communities

- Improve infrastructure at the Group's forestry property (Chile)
- Support home-based caregivers by providing a continence care app through "Medical Care Station", a medical and nursing care SNS platform, within the framework of the "Community-based Integrated Care Systems" promoted by the Ministry of Health, Labor and Welfare
- Create a workplace environment that offers employees challenges and growth potential (health and productivity management, diversity management, human resource development)



Conceptual drawing of the biomass boiler that makes use of pulp waste byproduct from the pulping process





Improvement of infrastructure at the Group's forestry property in Chile

overnance

ocial

Establish sound governance structure to support sustainable growth

- Conduct evaluation of the effectiveness of the Board of Directors (incorporate third-party opinion into the composition and operations of the Board of Directors)
- Review risk management framework and make decisions and implement concrete risk control measures according to the type of risk through a Compliance Committee **DAIO PAPER CORPORATION 22**

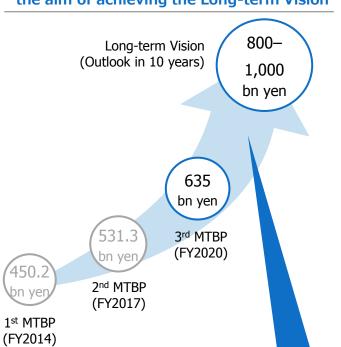
5. Building the foundation for sustainable growth (2) Reform of business process via IT investments geared toward business expansion



■ Strengthen the Group's management infrastructure during the 3rd MTBP (NEXT.DAIO Project)

- Enhance IT infrastructure to improve efficiency of group management
- Continuously promote the standardization of common operations, and construct a information system. infrastructure that will continue to be relevant $10\sim15$ years ahead

Advance the NEXT.DAIO Project with the aim of achieving the Long-term Vision



Outline of the NEXT.DAIO Project

1. Reform business process

(Business Process Reengineering)

- Share and consolidate operations of Personnel/General Affairs, Accounting, and Procurement within the Group
- Enhance speed of management
- Reinforce internal control

Daio Paper Daio Paper Daio Paper Business A Business B Subsidiary C **Common Group System** Implement a Shared Services Center (SSC) to reduce operating costs Standardization of rules and processes Logistics

2. Reform DCM · SCM

- Improve precision of sales/production planning
- Improve inventory turnover rate and logistics efficiency
- Improve customer service

3. Renovate core system

(Implement ERP)

- Improve work productivity, from procurement to production, sales and shipment
- Promote labor-saving
- Improve intra-Group data integration and operational efficiency with cloudbased unified data management

NEXT.DAIO Project: Strengthen Group Management Infrastructure

Improve and strengthen management efficiency and structure for sustainable profit to achieve the 3rd MTBP and the Long-term vision

5. Building the foundation for sustainable growth

(3) Reform of working styles



Diversity management

- Realize diverse and flexible working styles
 - As part of the initiatives to create a workplace environment that ensures that female employees who are engaged in manufacturing and logistics operations could work with a peace of mind, Daio Paper established an on-site childcare facility "GOO.N Sukusuku House" (Shikokuchuo city) in Apr 2018









- Provide support to balance work and career advancement with childcare
 - "GOO.N Sukusuku Leave (childcare leave)" for male employees, management training for managers with female subordinates
- Promote women's participation and advancement in the workplace
 - FY2020 targets: ratio of women in managerial roles 3.5%, ratio of women in career-track position 12.5% (Long-term targets: women in managerial roles 30%, women in career-track position 40%)
- Promote mid-career recruitment to facilitate expansion of overseas business

Health and productivity management

- Push forward initiatives such as "increase employee's health-consciousness", "create a comfortable workplace environment", "promote mental healthcare", "promote efforts to stop smoking"
- Certified as a "White 500" for Health and Productivity Management, obtained highest rank in "DBJ Health Management Rating"







The Third Medium-term Business Plan **Financial targets**

Net sales	635 bn yen
Operating income	32 bn yen
	(5.0%)
H&PC overseas net sales ratio	15%
ROE	8%
Net D/E ratio	1.6

(Assumptions for FY2020) Exchange rate: 112JPY/USD Dubai crude oil: 62USD/barrel



Cautions regarding forward-looking statements

The strategies, plan, targets and other forward-looking statements included in this document are derived by Daio Paper Corporation based on beliefs as well as assumptions made using information currently available to it, and are subject to contingencies, risks and uncertainties.

As such, actual future performance and results could differ materially from the statements included herein as a result of latent risks, factors not yet known to the Company or not currently considered material to the Company and its subsidiaries by the Company.