

‘Kureha’s Challenge 2022’

KUREHA CORPORATION

Review of ‘Kureha’s Challenge 2020’

(FY2019-2020 Mid-term Management Plan)

‘Kureha’s Challenge 2020’

- *Product Differentiation and New Business Creation* -

Management Goals

- Expand the PGA business and generate profit
- Strengthen the PVDF business for further expansion
- Optimize business models for existing businesses
- Globally explore and develop new businesses
- Strengthen management foundations

FY2018-2020 is a period to solidify the foundation for Kureha’s future expansion

Strategic direction

As a company driven by innovation, Kureha will develop differentiated products in the field of specialty chemicals and become a high value-added enterprise that continually contributes to the global society

KC2020 Review

KUREHA CORPORATION

(billions of yen)

	KC2020 targets	FY2020 results	Change YOY
Revenue	157.0	144.6	-8%
Core operating profit	18.0	18.9	+5%
Operating profit	18.0	17.3	-4%
Operating profit margin	11.5%	11.9%	
Profit for the period attributable to owners of the Company	14.0	13.5	-4%
ROA	Approx. 7.1%	7.0%	
ROE	8.0%	7.7%	

Revenue and operating profit fell below KC2020 targets:

Advanced Materials

- Achieved operating profit target for PVDF, despite a shortfall of volumes in the automobile LiB market due to China's revised NEV subsidy policies
- Delays in the development of PGA frac plugs used in ultra-low-temperature shale fields
- PGA sales volume target not achieved due to slower oil production in the pandemic
- Recorded an impairment loss of ¥1.6bn related to PGA due to changes in the business circumstance

Specialty Chemicals

- A slower-than-expected decline in agrochemical demand

Specialty Plastics

- Achieved profit targets for home products and fishing lines
- Not achieved sales and profit targets for packaging materials

Other

- Earnings grew in the environment engineering business due to increased volumes of low-PCB wastes and temporary post-disaster wastes

- Advanced Materials businesses, which key markets include automotive and shale oil and gas, were severely impacted by the economic slowdown during the pandemic and failed to meet targets at all profit levels
- Overall core operating profit reached its target due to an increase in value-added product volumes, cost reduction efforts, and increased earnings in the environmental engineering business
- Operating profit fell short of target primarily due to an impairment loss related to the PGA business

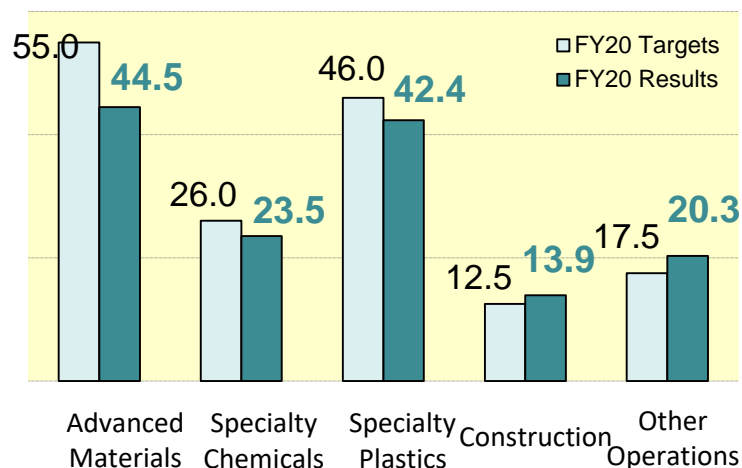
KC2020 Review

KUREHA CORPORATION

Segment performance (FY2020 results vs. targets)

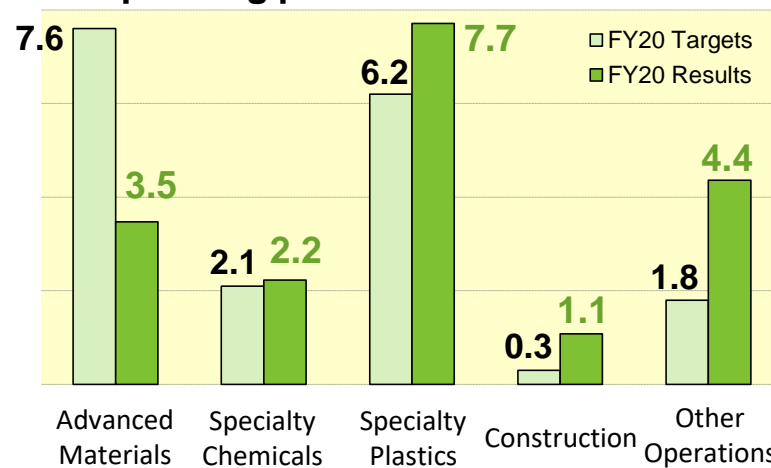
(billions of yen)

Revenue



FY2020 Targets: ¥157.0bn Results: ¥144.6bn

Core operating profit



FY2020 Targets: ¥18.0bn Results: ¥18.9bn

Factors attributing to core operating profit (vs. FY2020 targets)

- AM: PGA and PPS fell far short of profit targets more than offsetting profit achieved for PVDF
- SC: Improved margin in pharmaceuticals and steady volume growth in agrochemicals partially offset by a shortfall in industrial chemicals
- SP: Home products and fishing lines exceeding sales and profit targets partially offset by a shortfall in packaging materials
- CO: Higher construction volumes in the public sector and fewer expenses
- OO: Increased low-PCB waste treatment and temporary volume growth related post-typhoon waste treatment

KUREHA

Priority Measures

1. PGA: Business expansion and profit generation

- Generate earnings
- Launch ultra low-temp PGA frac plugs to accelerate sales expansion in the US
- Launch market development in China

Progress and Challenges

- Delays in the development of PGA frac plugs for ultra low-temperature application
- Market development in China lagged behind schedule
- Adopted flexible pricing strategies and expanded use of PGA frac plugs for full-bore application in high-/mid-temp shale fields
- Secured market access by launching intermediate non-PGA plugs in ultra-low temp shale fields

2. PVDF: Strengthening for further business expansion

2000tpa capacity Increase at Iwaki Factory
(→ Commercial production started in Jan. 2019)

- Debottlenecking at the Iwaki Factory facility to be completed in FY2021
- Construction plan for an additional production facility to be finalized and construction scheduled to start in FY2021

3. Optimization of existing business models

PPS: Start up an additional production facility in Feb. 2021

Home products: Maintain steady profit and develop new markets in East Asia

Packaging materials: Reconstruct its business strategy

- Completed the construction of an additional PPS facility in Jan. 2021 and will start commercial production shortly
- Needs to further collaborate with business partners to address changes in the PPS market

- Achieved profit growth for NEW Krewrap

- Completed the transfer of the blow bottle business
- Needs to respond to changes in the packaging materials market

Priority Measures

4. Exploration and development of new businesses

Explore new business themes in Japan and overseas

Invest resources to promote downstream business development and accelerate technology innovation

Speed up the launch of new businesses by leveraging external resources

5. Strengthening of management foundations

Improve management efficiency and strengthen the Group-wide management system

Enhance efficiency and productivity via the Reform Project; FY2019-2020 cost reduction target: ¥1.5bn

Improve operational efficiency with digital technologies; promote smart operation models in manufacturing and R&D divisions

Develop products to address social/environment issues, with a view to fulfilling the SDGs

Develop human resources for business globalization and new business creation

Progress and Challenges

- Collaborative projects continuing with multiple start-up companies

- Invested additional resources in the development of new agrochemicals and PVDF products

- Needs to review some new business themes due to changing market conditions (emerging competitors, earnings prospects, etc.)

- Expanded the environment business
- Completed the restructuring of several consolidated companies in Japan

- Achieved cost reduction twice more than originally planned through the Reform Project

- Still in process of transferring more personnel into strategic divisions

- Needs to further improve individual IT skills to promote digital transformation

- Needs to address global environment challenges including carbon neutrality

- Completed labor management consultations regarding a new personnel system

‘Kureha’s Challenge 2022’

**FY2021-2022 Mid-term Management Plan
(A Final stage of Kureha’s Challenge extension plan)**

Kureha's Challenge 2022

KUREHA CORPORATION

FY2021-2022: What We Do..

- A 'follow-through, uncompromising' stance (Kureha's culture)→ will complete the measures remaining from the previous mid-term management plan
- Will embody and clarify a future vision of Kureha Group and formulate an action plan to fulfill this vision from a medium-/long-term perspective
- Will strenuously carry out priority measures set out in 'Kureha's Challenge 2022'

Environment & Social Trends Around Us..

- Accelerating climate change • Transition to zero waste society • Carbon neutrality • Marine plastic pollution • Global population growth & aging society • Food shortages and polluted water resources • Improved living standards and advanced medical care • Changing individual life styles • Globalization and diversity • Digitalization and social network • Increasing geopolitical conflicts (trade wars)

Action plan to fulfill our future vision

'Kureha's Challenge 2022'

- Commit to achieve four management goals
- Achieve quantitative goals set on a year-by-year basis reflecting impact of the pandemic

Strategic direction:

Kureha wants to be..

'A high-value added enterprise that develops differentiated products in the field of specialty chemicals and continually contribute to society'

Areas we can offer solutions to:

- Mobility market: lightweight, high performance and low carbon solutions
- Materials to reduce environmental load
- Carbon neutrality and zero emission
- Sustainable food production and food loss reduction
- Chemical recycling



Kureha's Challenge 2022

KUREHA CORPORATION

Management Goals and Priority Measures

Expansion of Advanced Materials Businesses

- Solidify the foundation for the PGA business
- Expand the PVDF business
- Improve profitability in the PPS business
- Establish new business models for Advanced Materials businesses

Optimization of Existing Businesses

- Review business strategies and growth measures in response to changes in the business environment (carbon products, pharmaceuticals, agrochemicals)
- Increase earnings in the home products business
- Revise business strategies for packaging materials
- Develop new applications for existing products

Identification and Development of New Businesses

- Develop and commercialize environmental load reduction technologies to contribute to society
- Accelerate pipeline projects to develop new products
- Create new businesses with integrated in-house and external technologies

Strengthening Management Foundations

- Implement a new personnel system (further emphasizes role-/performance-based compensations and gradually extend retirement age to 65)
- Further strengthen production technology and cost competitiveness
- Strengthen IT-related human resources and promote digitalization
- Strengthen ESG management with a view to fulfilling the SDGs and achieving carbon neutrality

Quantitative Goals

**Quantitative goals are set on a year-by-year basis due to uncertainties related to the economic impact of the pandemic*

FY2021
Revenue
¥150bn

Operating profit
¥15bn

Net profit
¥10.7bn

Capital investment
¥17bn

Depreciation
¥11.7bn

R&D expenditures
¥6.1bn

KUREHA

PGA Business

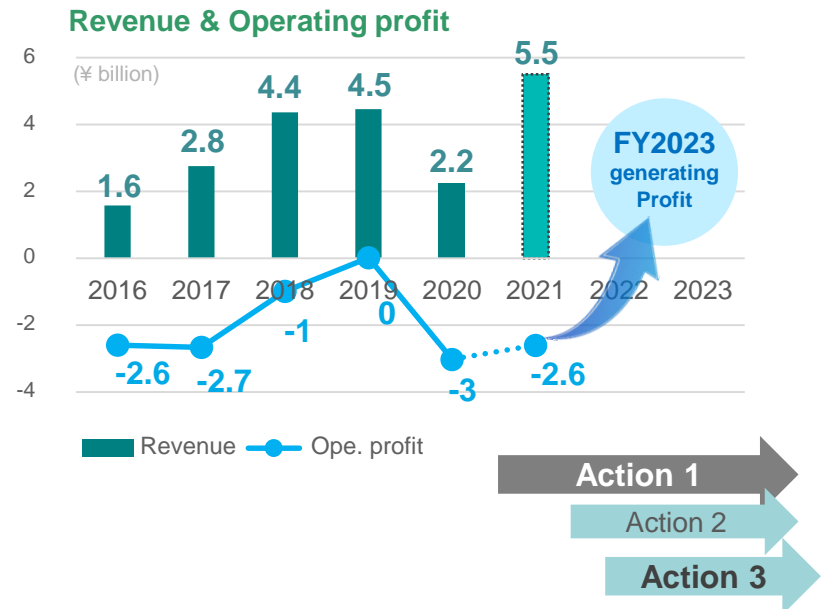
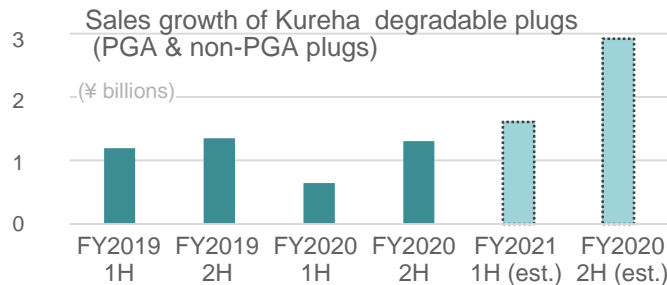
KUREHA CORPORATION

FY2020: ¥3.0bn in operating loss, ¥1.6bn impairment loss on manufacturing facilities

- Frac plug market volumes decreased by half from pre-pandemic levels due to plunging oil prices and a sharp drop in shale oil production
- Sales of Kureha original PGA frac plug grew after 3Q, driven by flexible pricing and increased full-bore applications (use for an entire wellbore) by major accounts, while stock shapes sales were slow due to customer-side inventory adjustments
- Recorded a ¥0.33bn loss on retirement of inventories (included in the above operating loss) and an impairment loss of ¥1.6bn (as 'other expenses') after re-valuing PGA-related non-current assets in the light of changing business conditions and ongoing product development

FY2021: Reducing operating loss to 2.6bn

- Will continue to execute measures to expand volume growth but expect to reduce operating loss marginally by ¥4bn due to lower prices and higher cost related to inventory withdrawals
- Aim to generate profit in and after FY2023



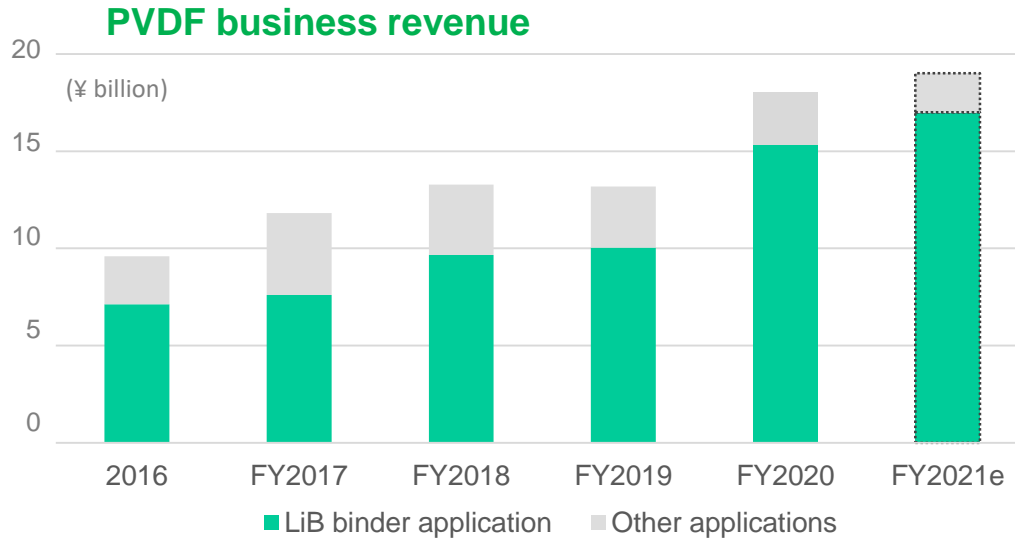
Action plans to achieve profitability

- 1- Expand full-bore applications for PGA frac plugs and increase a share in high-/mid-temperature shale markets with a new pricing strategy and by improving plug designs
- 2- Launch a non-PGA degradable frac plug in FY2021
- 3- Launch an improved PGA frac plug targeted for ultra-low temp application in FY2022 and increase its market share

KUREHA

PVDF Business

KUREHA CORPORATION



- Kureha maintains a roughly 40% share in the automotive LiB cathode binder market, serving major South Korean and Chinese lithium-ion battery (LiB) makers
- Demand recovered and growing rapidly after a temporary halt of LiB production in early 2020 amid the pandemic, driven by global environmental and economic initiatives
- Kureha China Changshu facility manufactures and supplies PVDF specialty binder grades (May 2020-)
- Ongoing studies for an additional PVDF facility (delayed due to the pandemic)
 - Location: China (tentative)
 - Other details to be released in FY2021 1H
 - Start of commercial production: FY2024 (tentative)

Growing production capacity

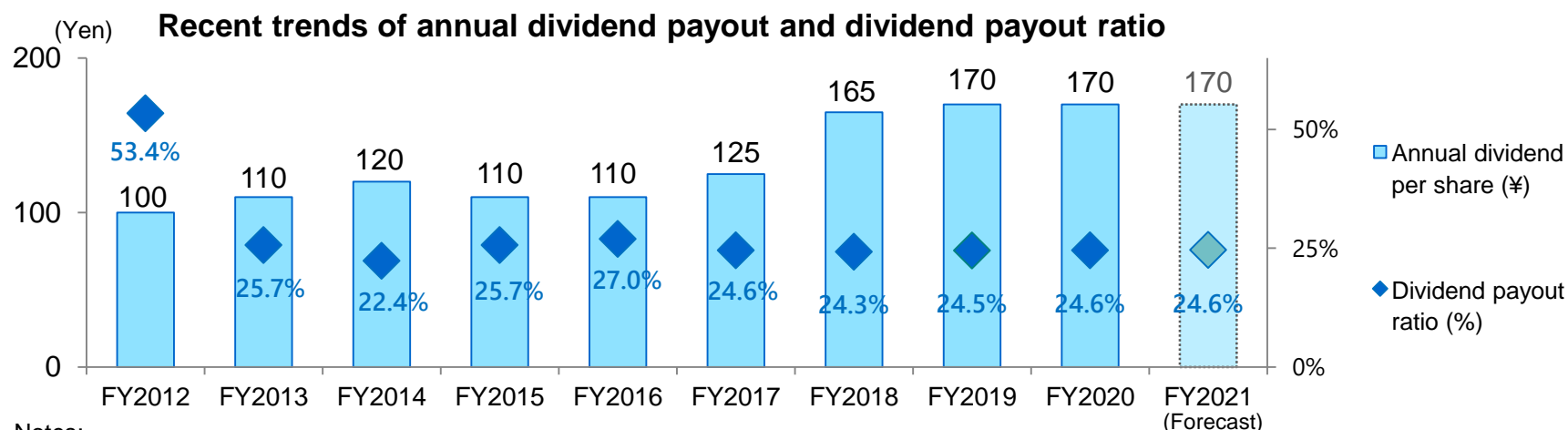
Feb 2019	2000tpa capacity increase at Iwaki Factory (Nameplate capacity: 6000tpa/Japan Iwaki Factory, 5000tpa/China Changshu Factory)
May 2020	Production of specialty grades for LiB binder application at China Changshu Factory (No change in nameplate capacity)
FY2022	Improved productivity for specialty grades at Iwaki Factory (No change in nameplate capacity)
FY2024	Production at a new facility in China (Nameplate capacity: 6000tpa or more)

Capital Policy and Returning to Shareholders

12

KUREHA CORPORATION

- Aiming for sustainable growth and enhanced corporate value, Kureha will set the stage for future business development by steadily achieving the management goals and quantitative targets set forth in Kureha's Challenge 2022 mid-term management plan. While maintaining financial stability, we will further strengthen our scrutiny of investments and enhance earnings capacity and capital efficiency.
- Our basic policy for the distribution of earnings is to strengthen the company overall to realize longer-term growth, prepare for future business expansion, enhance retained earnings, and provide a stable and continued dividend. In addition, Kureha will consider options of repurchasing its shares, which is flexible in nature, upon reviewing its financial conditions.



Notes:

- Kureha conducted a ten-to-one share consolidation on October 1, 2016. All figures in this chart are presented on a post share consolidation basis for comparison purposes
- Accounting standards: Japanese GAAP (-2015); IFRS (FY2016-)
- A commemorative dividend of ¥10 is included in FY2014 and 2018 annual dividends
- Kureha repurchased treasury shares in FY2018 (¥3bn) and in FY2019 (¥5bn)

KUREHA

Disclaimer

KUREHA CORPORATION

- These materials are supplied to provide a deeper understanding of our company, and are not intended to as a solicitation for investment or other actions.
- These materials have been prepared by our company based on the information available at this point in time. However, actual performance may produce results that differ from the plan due to unforeseeable events and factors.
- Please utilize these materials using you own judgment and responsibility.