



**June 19, 2023**

# **Management Briefing**

**Kuraray Co., Ltd.**

# Today's Agenda

## 1. Introduction

**Hitoshi Kawahara**

President and Representative Director

## 2. MonoSol Division and its Strategy

**Hiroaya Hayase**

Representative Director and Senior Managing  
Executive Officer

Vinyl Acetate Resin Company Executive Supervisor  
Vinyl Acetate Film Company Executive Supervisor

**Christian Herrmanns**

Executive Officer,  
General Manager of MonoSol Division,  
MonoSol, LLC. President

# Introduction : Vinyl Acetate Segment

We manufacture and sell materials from resin to film, starting with vinyl acetate monomer as raw materials

## Vinyl Acetate Segment

### Vinyl Acetate Resin Company

#### Poval Resin Division

KURARAY POVAL™,  
ELVANOL™  
PVOH resin



#### Eval Division

EVAL™  
EVOH resin and film  
PLANTIC™  
Biomass-derived  
gas barrier material



### Vinyl Acetate Film Company

#### Poval Film Division

Optical-use  
poval film



#### MonoSol Division

Water-soluble  
PVOH film



#### Advance Interlayer Solutions Division

Trosifol™,  
Butacite™ PVB film  
SentryGlas™  
Ionoplast interlayer





# MonoSol Division and its Strategy

-Growth Potential-

# Introduction

MonoSol business within the Kuraray Group

- Founded in 1953 in Indiana, USA
- Acquired by Kuraray 2012
- Part of Vinyl Acetate Film Company
- 750+ employees
- 7 plants





We believe in a  
future where  
nothing goes to  
waste.





MonoSol's mission is to innovate materials that make everyday life simpler, safer and more sustainable.



# Experts in water-soluble biodegradable polymer science



Access To Kuraray Polymer  
Synthesis Innovation



Global Market and Regulatory  
Expertise



Global Technical & Production  
Support Network





Pioneers  
of soluble-unit-  
dose detergent  
technology  
(no. 1 global  
market share)



## Other Water-Soluble Film Applications



Hospital  
Laundry Bags



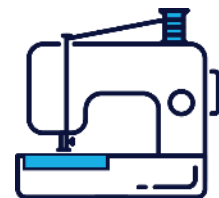
Agrochemicals



Personal Care &  
Cosmetics



Water Treatment Industrial / Institutional

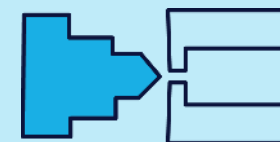


Embroidery

*B2B manufacturing  
processes that use our film.*



Solid Surface

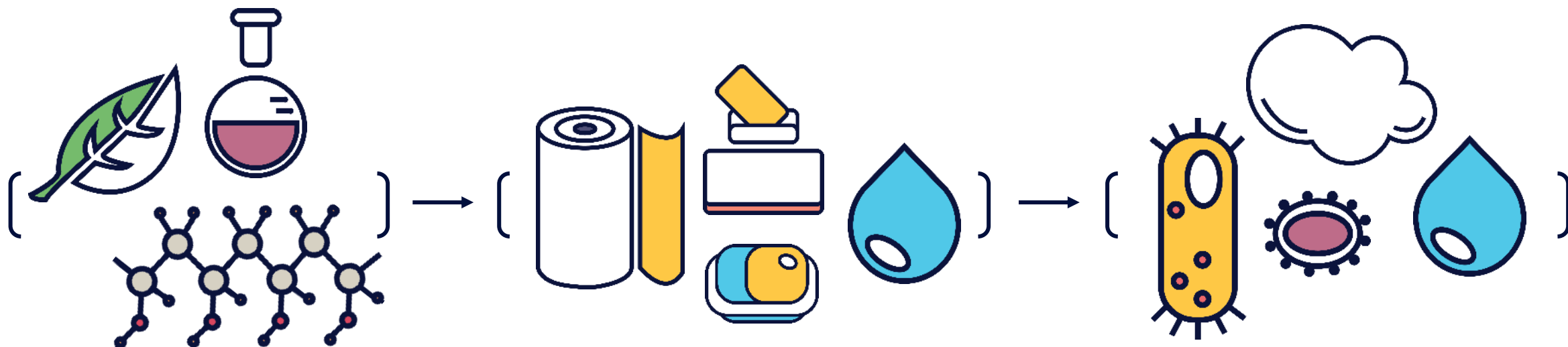


Composite  
Molding



Transfer Printing

# Enhancing Quality of Life and the Environment



## Beginning of life

We are increasing the percentage of bio-based materials and renewable energy to reduce our carbon footprint

## In use

Our materials work with consumers' behavior to create a simpler, safer and more sustainable product.

- ✓ *Reduced waste*
- ✓ *Safe handling of chemistry*
- ✓ *Reduced energy consumption*
- ✓ *Reduced CO2 emissions*

## End of life

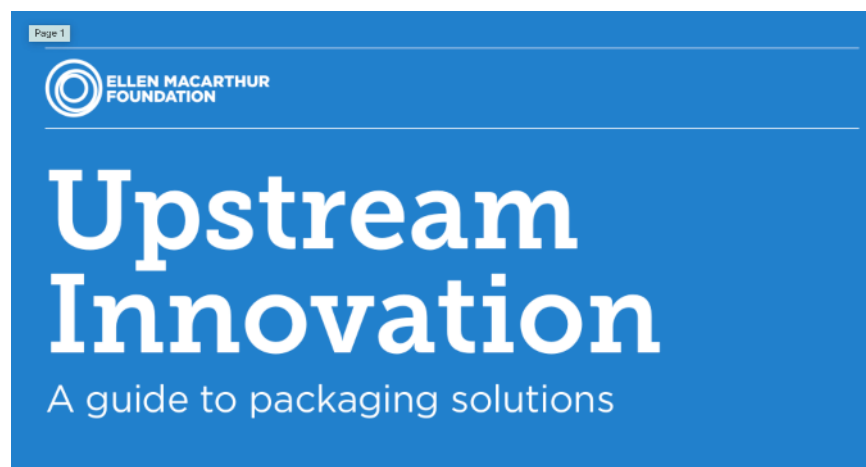
Our products have an excellent end-of-life story as they biodegrade rapidly

# Sustainability Endorsements

**Ecovadis Silver Rating:** Scored in 92<sup>nd</sup> percentile of all companies evaluated

**Ecolabel Compliant:** Market-specific products designed for sustainability endorsement by regulatory authorities around the world

**Environmental NGOs:** MonoSol films featured as solution to plastic packaging waste problems by Ellen MacArthur Foundation and WWF Australia





# Our Competitive Advantage

## Business Model:

- Being an integral part of Kuraray allows us to innovate resin and film to meet customer end-product performance criteria
- Deep integration and collaboration with the world's largest CPG (Consumer Packaged Goods) companies to drive product innovation and category growth
- Long-term, exclusive or semi-exclusive supply agreements

## Technical Superiority

Drive undisputed technical superiority in water soluble film development and production

## Agile Innovation

Act with the speed and agility of a startup to create business of the future

## Strategic Focus

## Operational Excellence

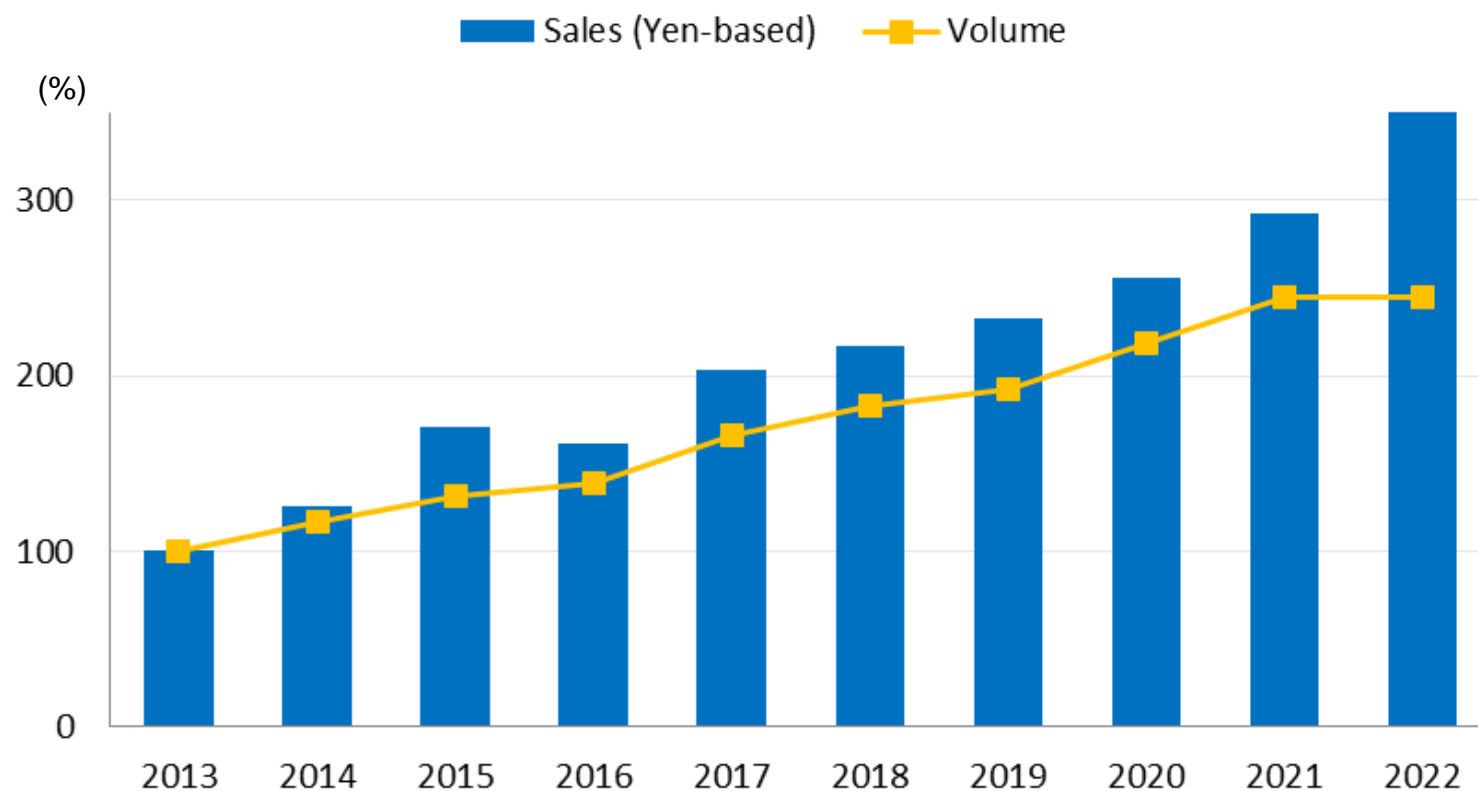
Deliver quality, safety and process improvements to drive productivity, investment and margin enhancement

## Organization & Culture

Create a mission-driven culture, committed to excellence with safety as the cornerstone of everything we do

# MonoSol Division's Sales and Volumes Trends

(2013 as 100%)



● Current socio-economic conditions putting pressure on consumer markets, especially in Europe while the US continues modest growth

- Russian market loss
- China lockdowns
- Inventory overstock for business continuity during COVID

## We have never been in a better position with our top three global customers



Premium SUD format continues to grow in US/ European markets with, approximately 30% of market today, heading to 50% share



Our largest, global customers are investing in the SUD format with marketing, R&D and new production facilities



We must remain at the forefront of innovation and sustainability



## Strategic Partner Status

**Strategic supplier to top 3 consumer home care product companies, representing over 90% of global laundry SUD retail market.**

## We are well-positioned in fast-growing regional markets

- Asia Pacific market growth accelerating, beginning in Japan and has started to spread in the region.
- Current SUD market share is low compared to US/Europe and expected to grow significantly.

# MonoSol's Growing Global Reach

## USA

- Merrillville (Headquarters)
- LaPorte
- Portage
- Duneland
- Indy

## Europe

- Hartlebury, UK
- Frankfurt, Germany
- Zimna Wódka, Poland

## Japan

- Tokyo
- Saijo

## Hong Kong



# Future Capacity Expansion Plan

New facility in Poland completed on time and ready to start production.

The facility will regionalize the supply chain:  
Resin > Film > Conversion > Customer

## Benefits

- Logistical business continuity
- Shorter trade routes improve quality, reduce cost and lower carbon emissions
- In the near-term, capacity increase allows maintenance and upgrades of U.S.-based lines
- In the long-term, capacity increase required to meet projected future demand



The new production facility in Poland is complete.



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Thank you!



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- All figures are rounded to the nearest hundred million yen.
  - This presentation contains various forward-looking statements which are based on the current expectations and assumptions of future events. All figures and statements with respect to the future performance, projections, and business plans of Kuraray and its group companies constitute forward-looking statements. Although Kuraray believes that its expectations and assumptions are reasonable, actual results and trends of Kuraray's performance could differ materially from those expressed or implied by such figures or statements due to risks and uncertainties in the future business circumstances. The factors which may cause such difference include, without limitation: (1) general market and economic conditions in Asia including Japan, the U.S., Europe and other regions; (2) fluctuations of currency exchange rates, especially between the Japanese yen and the U.S. dollar and other foreign currencies; (3) changes in raw material and fuel costs; (4) industrial competition and price fluctuations in Japan and international markets; (5) advance or delay in the construction of new plants and production lines; (6) successful development of new products and technologies; and (7) changes in laws and regulations (including tax and environmental) and legal proceedings.