

Intelligent Recycled Materials: Leading the Growth Seeds

Toward a Clean, Zero-Waste Society

Konica Minolta, Inc.

October 8th, 2025



Speakers

- **Ryuji Kamata**
General Manager, Manufacturing and Procurement for
Digital Workplace/Professional Print,
Corporate Vice President, Konica Minolta, Inc.
- **Toru Komatsu**
Corporate Strategic Planning Division
Strategic Business Development Department
Konica Minolta, Inc.
- **Weng Wenbin**
President
MJ MATERIAL TECHNOLOGY SDN BHD





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Three whys

**Paving the path to growth with
intelligent recycled materials**

**The Future Through the Voice
of Our Co-Creation Partner**

Ryuji Kamata
General Manager, Manufacturing and
Procurement for Digital Workplace/
Professional Print,
Corporate Vice President,
Konica Minolta, Inc.



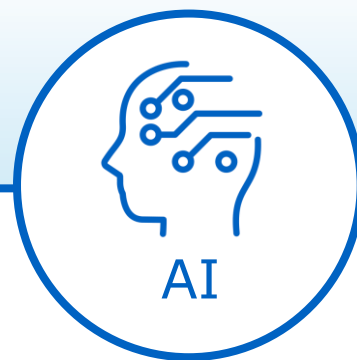
GX-related material issues



Addressing climate change



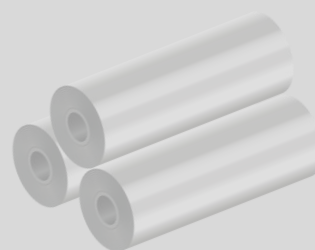
Using limited resources effectively



AI



Existing technologies



Barrier film of perovskite solar cells



Recycled plastic production technology



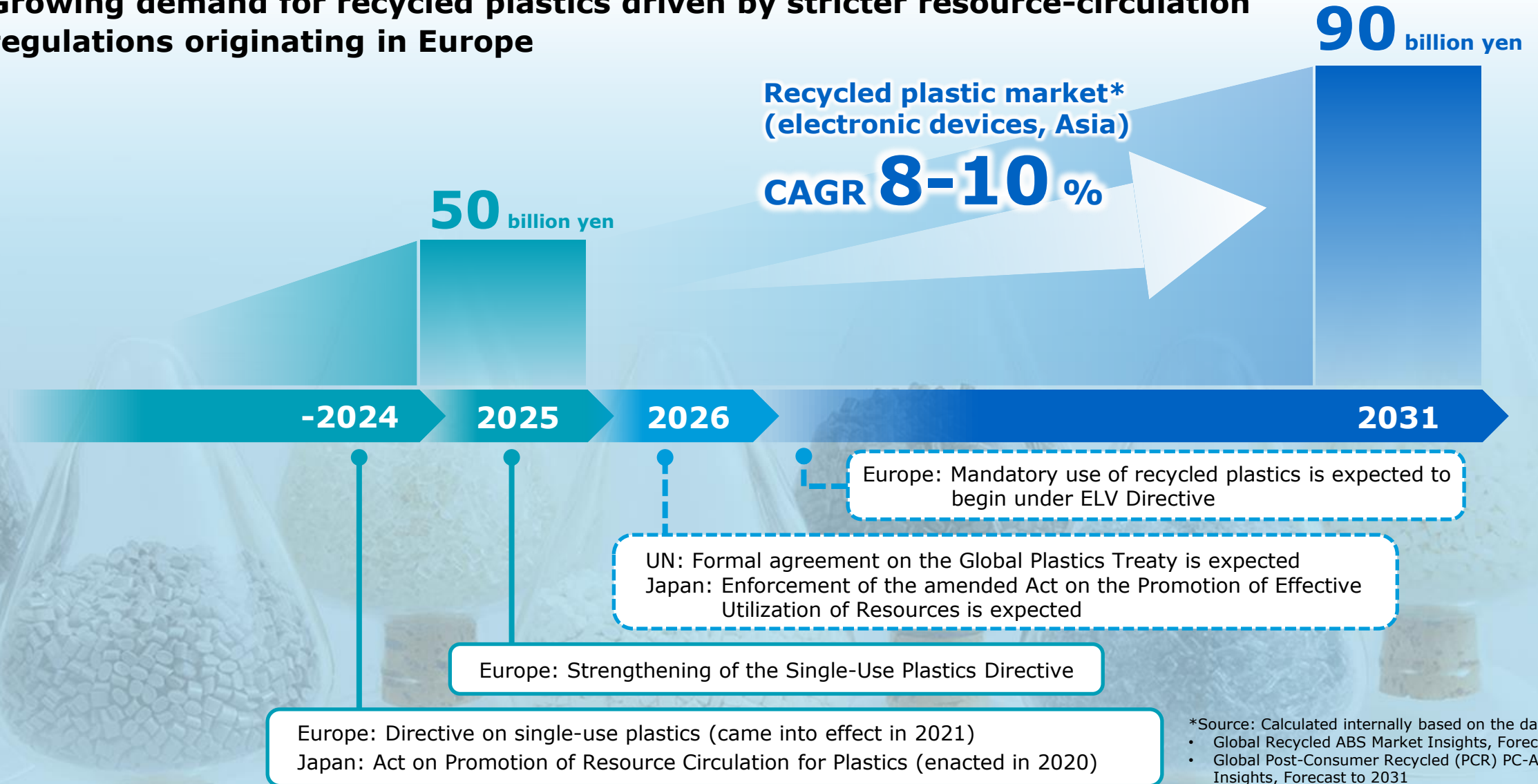
Process monitoring of biomanufacturing

Recycled Plastic Market Driven by Rising Environmental Awareness and Stricter Regulations



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Growing demand for recycled plastics driven by stricter resource-circulation regulations originating in Europe



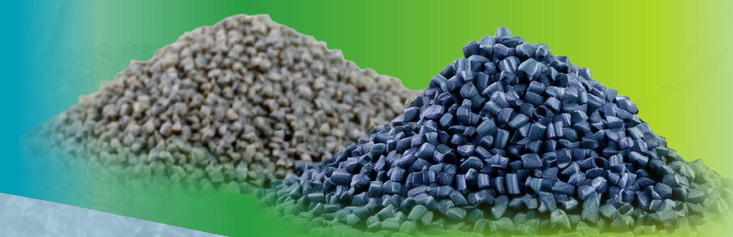
*Source: Calculated internally based on the data below

- Global Recycled ABS Market Insights, Forecast to 2031
- Global Post-Consumer Recycled (PCR) PC-ABS Market Insights, Forecast to 2031

Konica Minolta's Use of Recycled Plastics | Leading the Business Technologies Industry for 15 years



**Advancing to
intelligent recycled
materials**



2011

First use of recycled plastic in our MFPs

2014

Use of HDPE*¹ derived from waste materials for toner bottles

2018

Use of up to 37% of PCR*² in our MFPs

2024

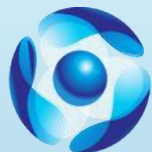
Expansion to third-party products

*1 HDPE: High-Density Polyethylene
*2 PCR: Post-Consumer Recycled material

Konica Minolta's Use of Recycled Plastics | Collaboration with MJ MATERIAL

Konica Minolta has been engaged in recycled plastic material development for 15 years, collaborating with MJ MATERIAL on technology development during part of that period

By newly integrating sensing and AI technologies, we have successfully evolved our work into intelligent recycled materials



MJ MATERIAL



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**Manufacturing
experience
in Malaysia**

**15 years of
recycled material
utilization**

**Production technology
Polymer technology**

**Expertise in materials
and molding**

Supplier perspective

Customer perspective

**Intelligent recycled
materials**

**Sensing/
AI technologies**





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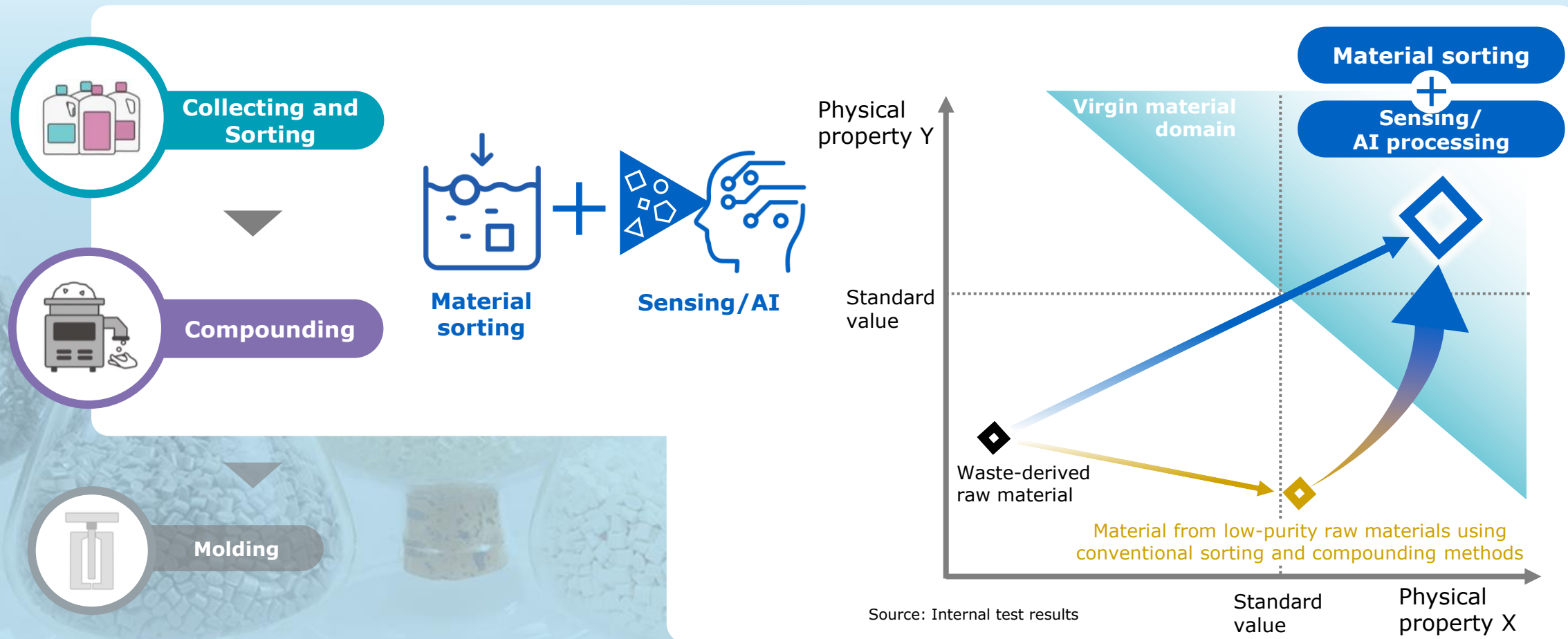


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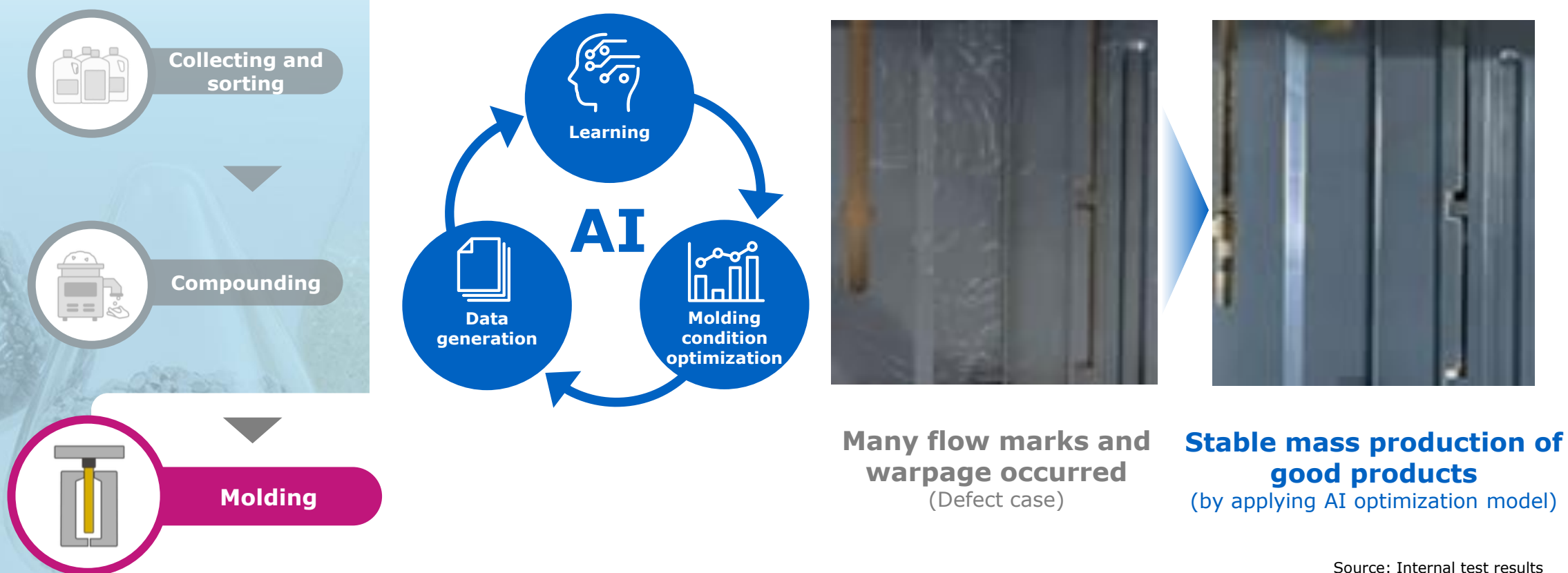


Intelligent Recycled Materials | Achieving Virgin-Equivalent Material Properties Through Proprietary Technology

Proper impurity removal through combined separation techniques
Compounding condition optimization with proprietary sensing and AI technologies



Providing proprietary AI solutions for molding
Enables stable mass production of high-difficulty molded parts with customer-required quality



Challenges and Market Opportunities

The supply of high-grade raw materials is limited

Variability in the physical properties

Molding requires more time and effort due to the variability

Intelligent Recycled Materials

Approach

Controls variability in the physical properties
Enables utilization of a wide range of raw materials

AI provides optimal molding conditions
Free the production site from troubles

Value

- ✓ A dramatic increase in the utilization of recycled plastics
- ✓ Realizing a user-friendly circular economy



Target Markets for the Intelligent Recycled Materials

Starting with electronic device and home appliance market in Asia

Expanding target markets by broadening target products, regions and resin type coverage

+Automobile
+Expansion of resin types



**Electronic devices/
home appliances
Asia/Europe/
North America**

+Europe/North America
**Total: Approx.
180 billion yen**

Electronic devices/
home appliances
Asia
Approx.
90 billion yen

Approx.
50 billion yen

Electronic devices/
home appliances
Asia

Sources: Calculated internally based on the data below

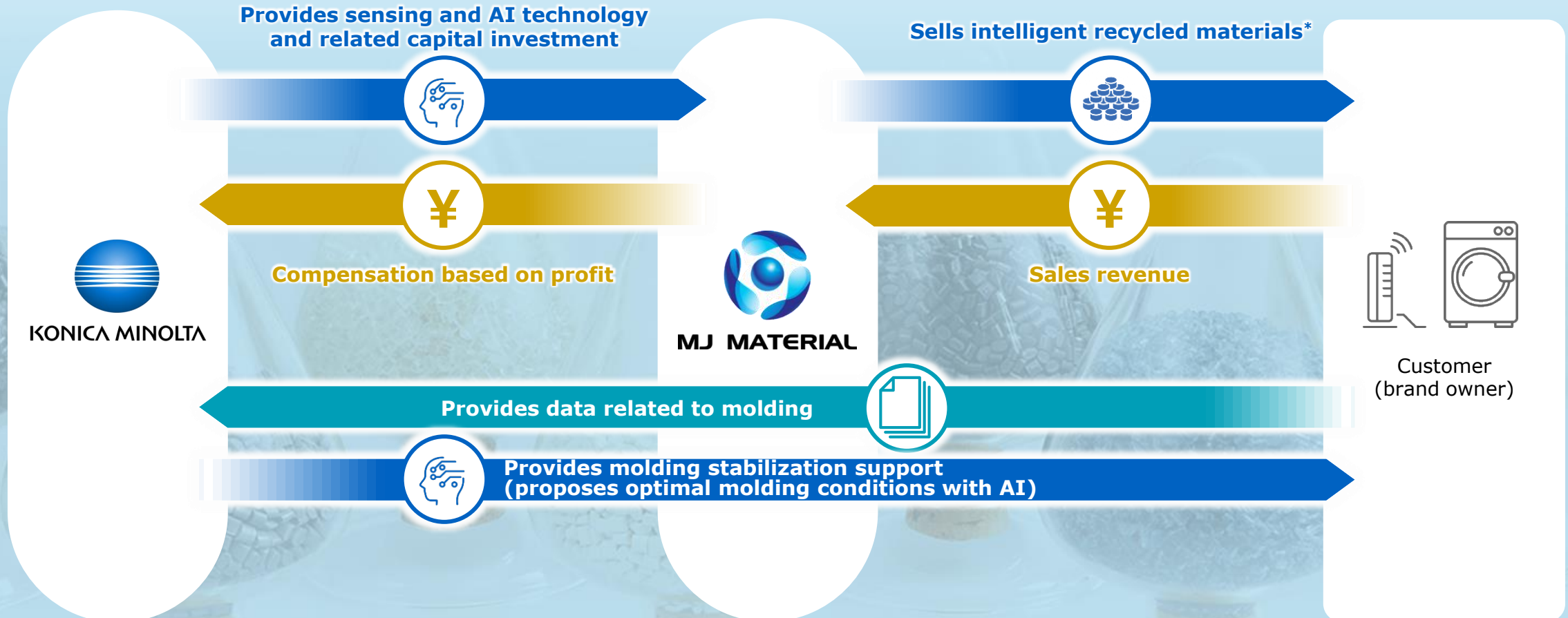
- Global Recycled ABS Market Insights, Forecast to 2031
- Global Post-Consumer Recycled (PCR) PC-ABS Market Insights, Forecast to 2031

FY2025

FY2031

Maximizing Value Through Partnership with MJ MATERIAL

Ensuring material performance of intelligent recycled materials by leveraging proprietary sensing and AI technologies
Achieving high profitability by utilizing MJ MATERIAL's assets and reducing capital investment
A virtuous cycle business model that provides customer-supporting solutions and builds long-term relationships



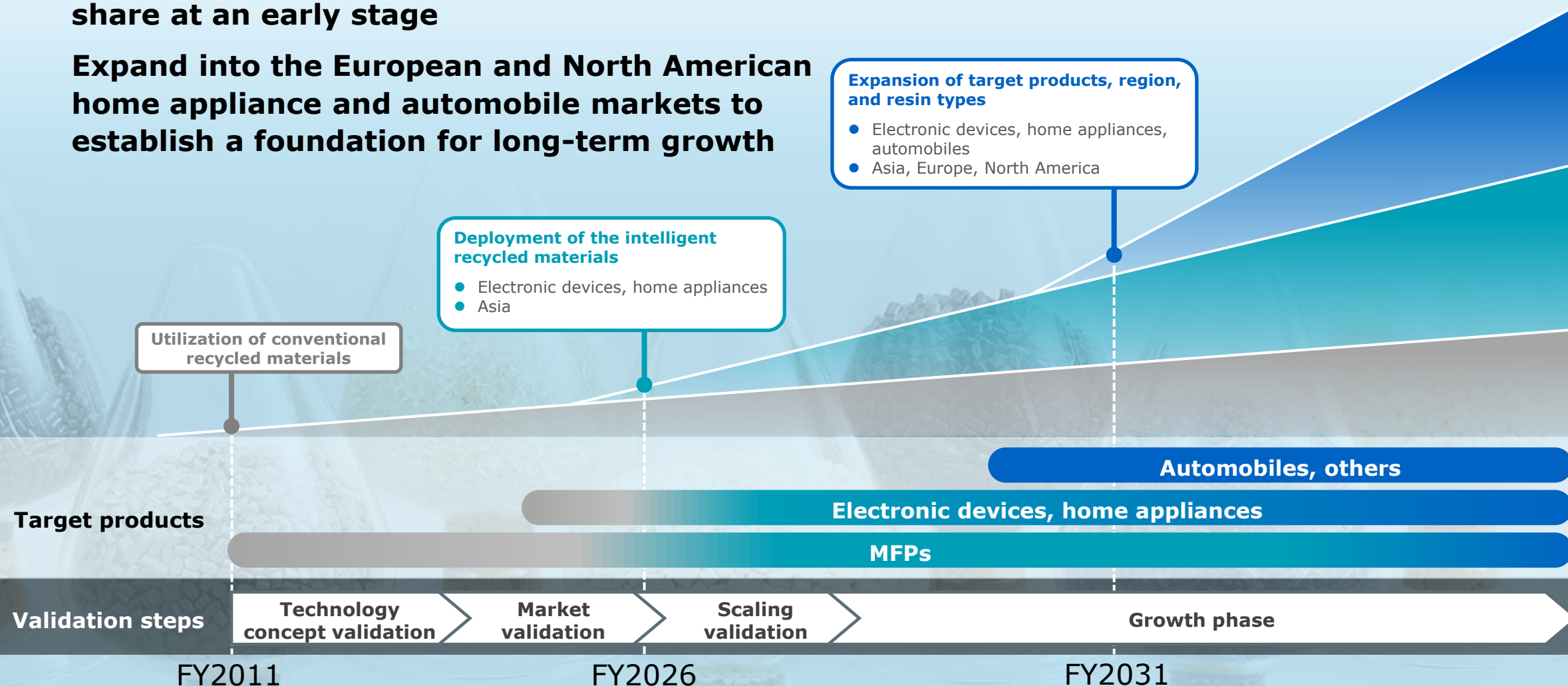
*Konica Minolta also plans to conduct sales activities using its own sales channels

Business Growth Concept of the Intelligent Recycled Materials

Sales scheduled to start in FY2026

Start with Asian electronic device and home appliance market; aiming for a 10% market share at an early stage

Expand into the European and North American home appliance and automobile markets to establish a foundation for long-term growth





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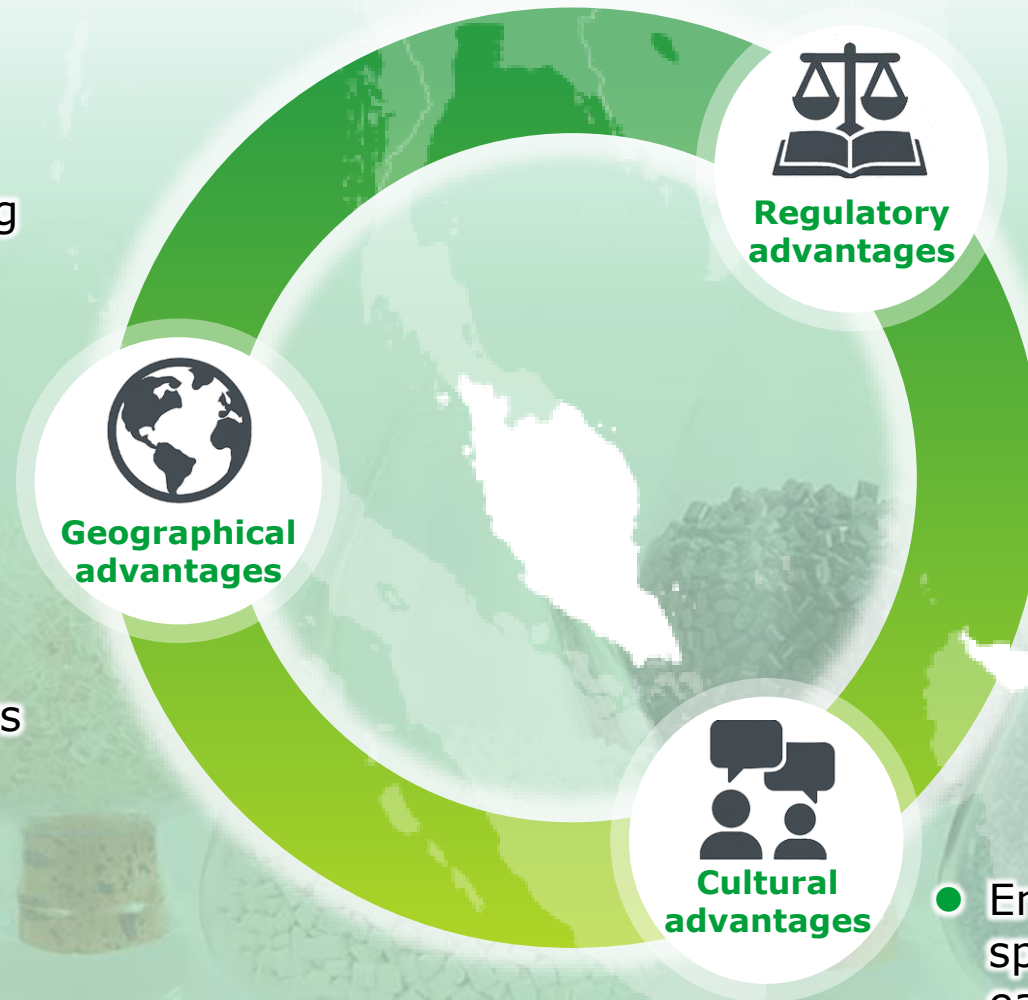




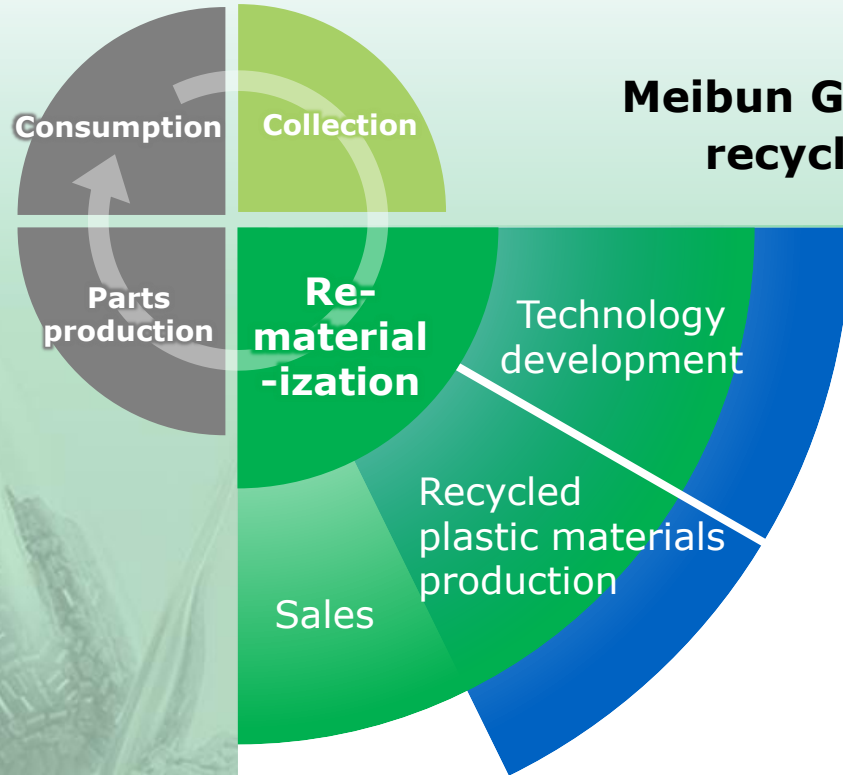
Company Name	MJ MATERIAL TECHNOLOGY SDN BHD
Establishment	2014
Location	Penang, Malaysia
Customer	Electronic device manufacturers, chemical manufacturers, consumer goods manufactures, etc.
Business	Development and production of recycled materials through material recycling ● A group company serving as the main development and production base for Meibun Industry Co., Ltd. (Toyohashi, Aichi), which operates an integrated process from collection to sales of recycled plastics ● Business partnership with about 20 companies in the U.S., U.K., Hungary, Australia, and the Middle East for collection of recyclable raw materials

Why Malaysia?

- A well-developed Port Klang and expressway network enable fast import and export in international logistics
- Easy access to major markets as a hub in Southeast Asia
- Low risk of natural disasters (e.g., earthquakes, typhoons)



- Strict licensing system allows the import of recyclable resources as raw materials
- Improved transparency and legal reforms make it easier for foreign companies to enter the market
- English and Chinese are widely spoken, making communication easy and barrier-free



Meibun Group provides a one-stop service covering the entire recycling process, from collection to re-materialization



**Sensing technology
AI technology**



**Production technology
Polymer technology**

Collaboration with a reliable partner

**Ensuring stable material procurement regardless of raw material type
Improving efficiency and stabilizing quality in material production**

Delivering the Value of Intelligent Recycled Materials to Customers

In 2026, a new plant will open in Kuala Lumpur
Production line for intelligent recycled materials is scheduled to begin operation with Konica Minolta's technology

Penang lead plant



Port Klang



**New plant in
Kuala Lumpur**



New plant in Kuala Lumpur

Location	Negeri Sembilan, Malaysia
Scheduled opening	Spring 2026
Site area	51,000m ²
Production capacity	75,000 tons per year (5 times the capacity of the Penang plant)

An industry-first solution



MJ MATERIAL

Supplier
perspective



Customer
perspective



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End-to-end model: collection/shredding/washing and sorting/
compounding/molding

Enabling the accelerated deployment of
intelligent recycled materials
with superior supply reliability and quality consistency

- **Acquiring new customers**
- **Expanding sales to existing customers**

Intelligent recycled materials enable stable supply and consistent quality regardless of raw material source

Giving new value to what was once discarded

– Toward a clean, zero-waste society



MJ MATERIAL

Vision:

- Giving used plastics a new future
- Transforming resources into new value through our unique technology – Shaping a sustainable future



**Sales of 10 billion yen
in the short term
Toward further growth
in the medium to long term**



Automobiles



Home appliances



Start of intelligent recycled materials supply
Start of operations at the new Kuala Lumpur plant

Electronic devices



2025

2026

2027

2028

2029

2030



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