

Stage

R&D

Introduction consideration

Practical stage

Keyword

Chemical
Recycling

Circular
economy

Use

Food Packaging / Medical Devices / Cosmetic Containers /
Automotive Components / etc.

Challenge

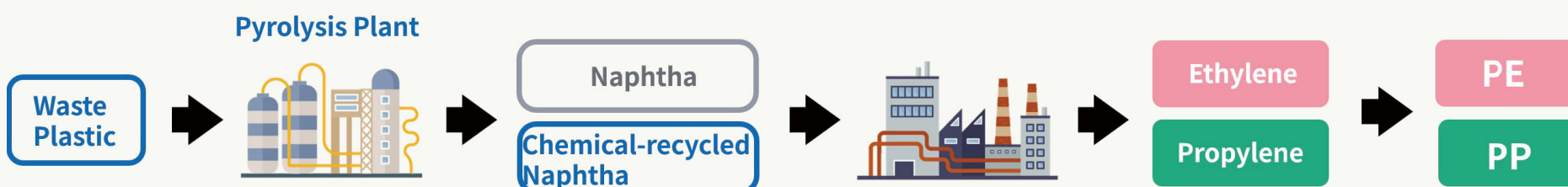
- There is a growing demand for the use of recycled materials driven by the transition to a circular economy and compliance with evolving regulations.
- While the use of recycled materials is desired even in applications requiring high levels of safety, hygiene, mechanical performance, and durability, mechanically recycled materials often cannot meet the required performance and quality standards.

Solution

- Waste plastics are chemically recycled using supercritical water technology, breaking them down into feedstock-grade oil and converting them into chemically recycled PE/PP with virgin-equivalent quality.

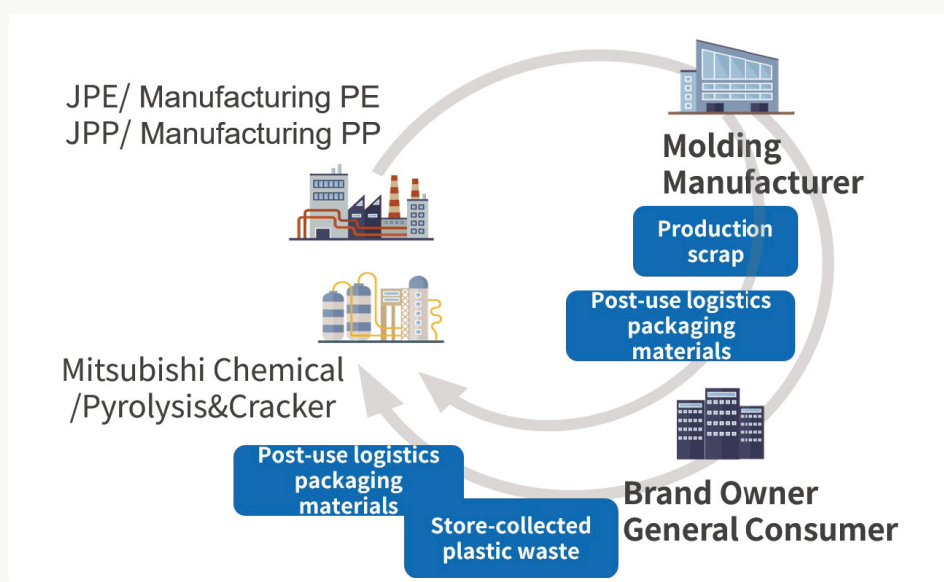
※ Provided through an ISCC PLUS-certified mass balance approach.

※ Mass balance is a chain-of-custody method that allocates a specified share of recycled feedstock to selected products when multiple feedstocks (e.g., fossil-based and recycled feedstocks) are processed together.



Benefit

- Reduced performance and quality validation efforts by utilizing existing production facilities to manufacture chemically recycled PE/PP from recycled feedstock oil.
- Enables the establishment of a closed-loop circular system through the recovery and recycling of production scrap, manufacturing waste, and post-use products generated throughout the supply chain.



Contact



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