

Case Study

Market Intelligence of Rigid Packaging Recycled Resins (R-HDPE, R-PET and R-PP)

CLIENT

A leading multinational consumer goods company wanted to understand the entire value chain of the recycled polymers (R-HDPE, R-PP, R-PET) for rigid packaging, along with supply analysis, technology landscape, and pricing dynamics.

RESEARCH METHODOLOGY

Desk research (Industry associations, commercial databases, Aranca research repository and public sources of information); 30+ telephonic interviews with subject matter experts

RESEARCH FRAMEWORK & DELIVERABLES

- **VALUE CHAIN OVERVIEW:** Detailed value chain analysis in prominent regions and countries primarily understanding the roles, responsibilities of market participants and integration in the value chain
- **MARKET ANALYSIS:** Understanding demand-supply dynamics across regions and key countries by resin type, leading players, capacity additions in Europe, Asia-Pacific, North America
- **PRICE MODEL AND MECHANISM:** Insights on resin price index and indices, price correlations, M-o-M growth rate, price level by month/quarter, waste prices index, drivers affecting prices, pricing models, contract vs spot-buying & sourcing
- **TECHNOLOGY LANDSCAPE:** Detailed analysis on technology evolutions in depolymerisation, pyrolysis, gasification and solvent dissolution, including company landscape, consortiums and ISCC mass balance approach

SAMPLE ANALYSIS TEMPLATES

Informal waste collection is xx in Asia and LATAM, while in western market its xx; recycling rate is higher in European market (xx%) while in other markets it is around xx%

Plastic Recycling Value Chain

Regions	Countries	Waste Generated (K. Tons)	Collection %	Recycled %**	Energy Recovery %	Landfill %	Uncollected %	Recycled Waste Collection - Formal Vs Informal
Asia	Thailand	xx	xx	xx	xx	xx	xx	Informal
	Indonesia	xx	xx	xx	xx	xx	xx	Informal
	Vietnam	xx	xx	xx	xx	xx	xx	Informal
	Philippines	xx	xx	xx	xx	xx	xx	Informal
Americas	India	xx	xx	xx	xx	xx	xx	Informal
	Mexico	xx	xx	xx	xx	xx	xx	Both formal & informal
	Argentina	xx	xx	xx	xx	xx	xx	Informal
	Brazil	xx	xx	xx	xx	xx	xx	Informal
Europe	USA	xx	xx	xx	xx	xx	xx	Formal
	Poland	xx	xx	xx	xx	xx	xx	Formal
	Italy	xx	xx	xx	xx	xx	xx	Formal
	UK	xx	xx	xx	xx	xx	xx	Formal
Africa	Germany	xx	xx	xx	xx	xx	xx	Formal
	Russia	xx	xx	xx	xx	xx	xx	Formal
	South Africa	xx	xx	xx	xx	xx	xx	Informal

Source: Aranca Analysis
aranca Report Rigid Packaging Market Intelligence Study - PCR Resins | Client | Confidential | 41

Recycled PET resin has the highest availability owing to high bottle-to-bottle recycling rate due to constant demand from the beverage industry

Sourcing Analysis

Parameters	R-PET	R-HDPE	R-PP
Relative Availability of recycled resin	High	Medium	Low
Tolling	Current	Medium	Low
	Future	High	Medium
Preferred Pricing Model in the next 2-3 years	Europe and US - Index-based pricing		
Price Index	Asia and LATAM - Spot pricing		
	<ul style="list-style-type: none"> Europe - ICIS Asia - ICIS US - OPIS 	<ul style="list-style-type: none"> Europe - ICIS US - OPIS 	<ul style="list-style-type: none"> Europe - ICIS US - OPIS
Indices	Preference for indices depends upon the sourcing location, availability and requirements of the end user		
Key End-use Industries	<ul style="list-style-type: none"> Beverage Packaging Industrial and Clothing Fibre Automotive 	<ul style="list-style-type: none"> Non-food Packaging Furniture and Home interior Pipes 	<ul style="list-style-type: none"> Automotive Non-food Packaging Industrial and Clothing Fibre

Source: Primary Research, Aranca Analysis
aranca Report Rigid Packaging Market Intelligence Study - PCR Resins | Client | Confidential | 111