

# PET Packaging

October 2018

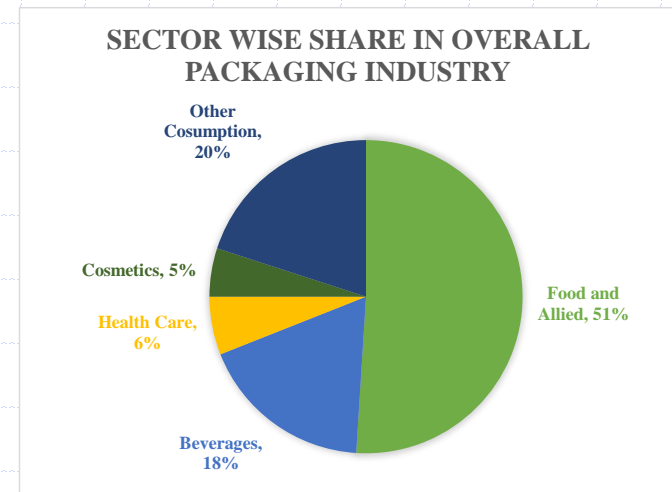
# Packaging Industry

## Packaging Universe of Pakistan:

- Pakistan's Packaging Industry universe includes:
  - Paper and Board Packaging
    - Folding Cartons
    - Corrugated Packaging
  - Plastic Packaging
    - PET, Flexible Packaging and BOPET
    - New Material – Bioplastic and Oxodegradable Plastic Packaging
  - Metal Packaging
    - Tin Plate
  - Glass Packaging

## Sectoral Break-up:

- In 2016, global packaging market was valued approximately above US\$500bln.
- Whereas, the total market value of Pakistan's packaging industry is ~ US\$5bln.
- Major consumer of packaging industry are shown in the pie chart



# Plastic Industry| Underlying Driver

- Country's total plastics consumption, including packaging segment, is around 5.5 kg per capita with an estimated growth rate of around 8% per annum.
- Its projected that industry's growth may go up to 10% per annum in coming 6 - 7 years.
- Following are the growth drivers;
  - An increase in country's per capita income
  - Urbanization
  - Spreading concept of vast shopping malls on modern lines
- As per estimates, hardly 10% of the plastic polymers are locally produced.
- Remaining 90% of the demand is fulfilled through imports.



# PET Packaging

- Among various plastic packaging products, PET occupies prime position in the sector.
- PET is the world's packaging choice for many foods and beverages because it is hygienic, strong, lightweight, shatterproof, and retains freshness.
- PET, *polyethylene terephthalate*, is a clear, strong and lightweight plastic belonging to the polyester family.
- It is typically called "polyester" when used for fibers or fabrics, and "PET" or "PET Resin" when used for bottles, jars, containers and packaging applications.
- PET bottle manufacturing process involves two basic stages:
  - i. Preform Manufacturing in an Injection Mould,
  - ii. Bottle Blow Moulding
- Consumers can identify PET bottles by the triangular # as a resin identification code found on the bottom of PET bottles and jars.
- Globally, PET packaging market over the next five years is expected to post a volumetric growth ~ 3.8% to manufacture 21mln tons per annum.



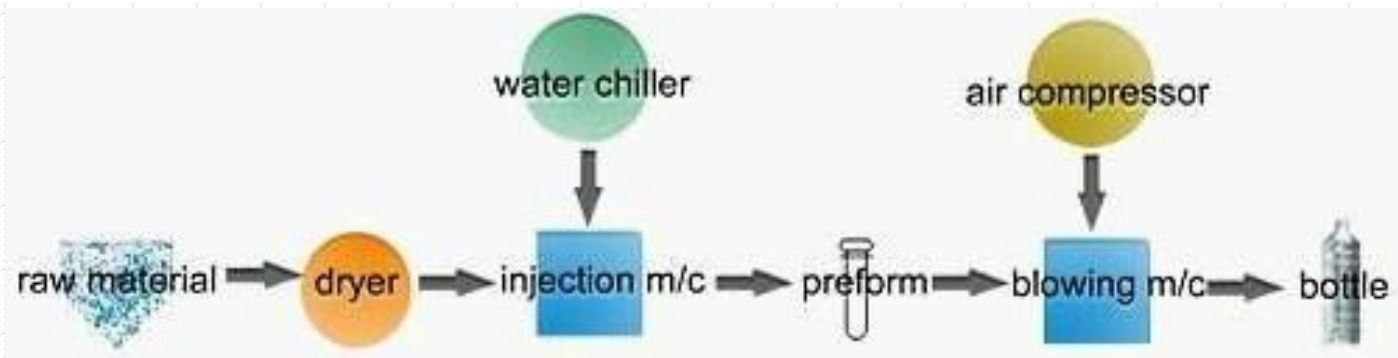
# Process Flow

## PET Preform

- PET resin, after being processed through the drying process, goes into the injection moulding machine to form PET preform.
- Here, chilled water is passed through the injection mould, to bring the preform at room temperature for packaging and/or for blowing.

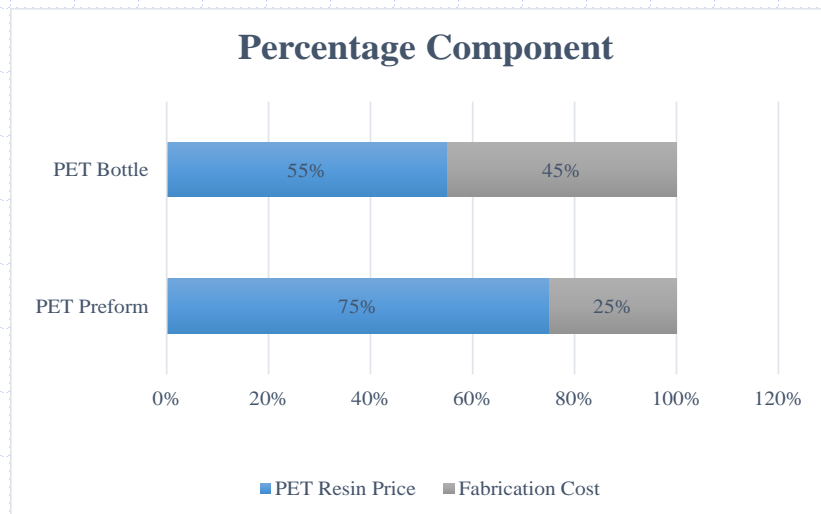
## PET Bottle

- PET preform is reheated in the crystallization machine and passed on to the blowing mould.
- Here, air is compressed in to give PET bottle its final shape.



# Cost Components

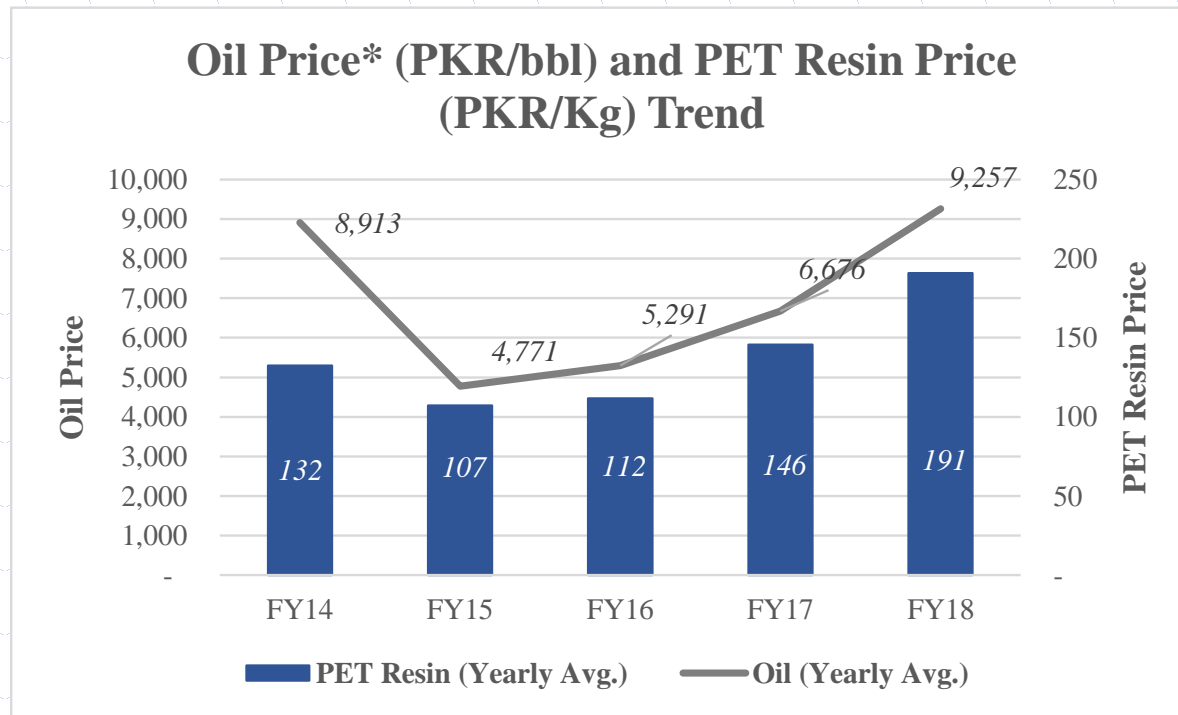
- Different products are converting to PET bottles for packaging their products mainly to seek cost efficiency and better preservation.
- The Cost of PET preform and bottle has two components:
  - PET Resin price
  - Local fabrication cost
- Following figure shows the percentage component of each cost in the two products:



- Fabrication cost differs for each company. However, it includes: labelling, packaging, power, admin and selling, freight, wastage and others.

# PET Resin Pricing

- The price of PET Resin, in both international and local market, is reliant on international oil prices.
- The price trend for PET resins is shown in figure below:



\* Converted at period's prevailing exchange rate.

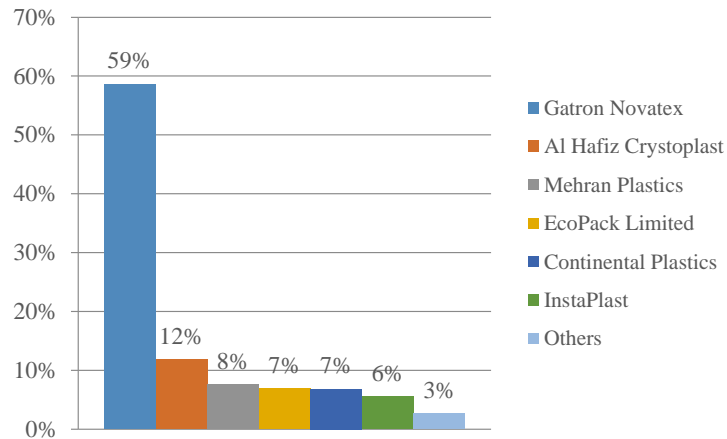
# PET Industry Revenue

	FY15	FY16	FY17	FY18
<b>Anticipated Demand for Bottles Beverage Industry - mln units</b>	<b>3,065</b>	<b>3,537</b>	<b>3,872</b>	<b>4,825</b>
Growth Rated Expected		15%	9%	25%
<b>PREFORMS</b>				
Outsourced Preform Market in Million Units	2,518	2,917	3,195	4,107
Weighted Average PET Resin rate per Kg	111	115	150	180
Average Preform size (gms)	35	35	35	35
PET Resin cost per Preform in PKR	3.9	4.0	5.2	6.3
Average Fabrication Price per Preform in PKR	1.3	1.3	1.5	1.5
Total Price Per Preform - PKR	5.2	5.4	6.8	7.8
<b>Total Revenue of Preform Market (PKR - mln)</b>	<b>13,142</b>	<b>15,665</b>	<b>21,587</b>	<b>32,069</b>
<b>BOTTLES</b>				
Outsourced Bottle Market in Million Units	547	620	677	718
Weighted Average PET Resin rate per Kg	111	115	150	180
Average Bottle size (gms)	35	35	35	35
PET Resin cost per Bottle in PKR	3.9	4.0	5.2	6.3
Average Fabrication Price per Bottle in PKR	6.7	6.9	5.8	5.8
Total Price Per Bottle PKR	11	11	11	12
<b>Total Revenue of Bottle Market (PKR - mln)</b>	<b>5,796</b>	<b>6,751</b>	<b>7,503</b>	<b>8,713</b>

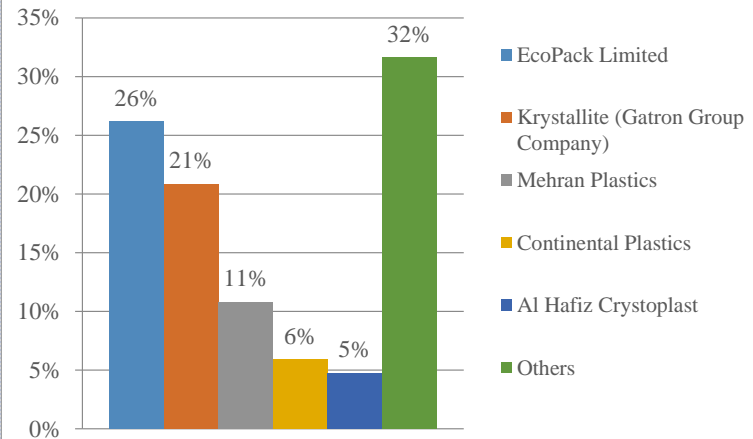


# Key PET Industry Players

## PET Preforms - Market Share



## PET Bottles - Market Share



# Key PET Industry Players

Segment Wise - Performance									
PET Packaging									
Injection Performance						Blowing Performance			
EcoPack Limited			Gatron Industries Limied			EcoPack Limited			
FY18	FY17	FY16	FY18	FY17	FY16	FY18	FY17	FY16	
<b>Production</b>	<b>mln units</b>								
Installed Capacity (no. of preforms/bottles)	797	416	416	1,150	1,239	838	304	304	304
Actual Capacity (no. of preforms/bottles)	388	283	271	780	1,077	534	174	159	163
Utilization	49%	68%	65%	68%	87%	64%	57%	52%	54%
<b>Balance Sheet</b>	<b>PKR - mln</b>								
Total Assets	1,180	719	701	2,015	2,534	1,358	522	302	297
Total Liabilities	549	192	168	677	315	103	193	133	149
<b>Performance</b>	<b>PKR - mln</b>								
Turnover	1,606	750	685	4,581	5,909	3,172	1,707	1,455	1,412
Gross Profit	148	82	66	607	406	92	260	275	276
Operating Profit	74	36	35	-	-	-	182	186	212
<b>Margins</b>									
G.P Margin	9%	11%	10%	13%	7%	3%	15%	19%	20%
Operating Margin	4.6%	4.8%	5.2%	-	-	-	10.7%	12.8%	15.0%

# Regulatory Structure

Regulatory Structure			
		%	Stage of Imposition
Custom Duty	Polymers of Ethylene in primary form	5%	On Import
	PET Resin - Bottle Grade	8.5%	
	Uncoated film of PET	11%	
	Film of ethylene	16%	
Sales Tax		17%	On Sale
Income Tax		Minimum Tax Regime	On Profit

- Tax collected under section 148 of the Ordinance from an industrial undertaking importing plastic raw material, shall now constitute minimum tax on the income of such importer.
- Furthermore, commercial importers and industrial undertakings importing plastic raw material, shall forthwith be subject to collection of advance tax at the following rates:
  - 1.75% of the import value as increased by customs duty,
  - Sales tax and Federal Excise duty in the case of an industrial undertaking, being a filer, and importing plastic raw material for its own use, shall be minimum tax in the case of an industrial undertaking,
  - 4.5% of the import value as increased by customs duty, sales tax and Federal Excise duty in the case of a commercial importer, being a filer, and importing plastic raw material.

# Key Drivers + Challenges

## Growth Drivers

- Beverage industry product penetration and conversion to PET bottles
- Increasing trend of consumerism
- Entry of new players in the market
- Increasing trend juices towards PET packaging

## Growth Challenges

- Increased tariffs upto 60% on PET Resin imports by EU, Turkey and now USA
  - Exports of PET Resin to US accounts ~ 41% (\$64mln) of Pakistan's total PET exports
- Removal of anti-dumping duties upholding some conditions by Canada
- Identify new markets or recover the lost grounds to maintain double digit growth

<b>Research Team</b>	<b>Adnana Dilawar</b>	<b>Silwat Malik</b>	<b>Faiqa Qamar</b>
	<a href="mailto:adnan@pacra.com">adnan@pacra.com</a>	<a href="mailto:silwat.malik@pacra.com">silwat.malik@pacra.com</a>	<a href="mailto:faiqa.qamar@pacra.com">faiqa.qamar@pacra.com</a>
<b>Contact No.:+92 42 35869504</b>			

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