

**RETHINK  
RENEW  
REIMAGINE**



## ABOUT US **JayBharat**<sup>®</sup>

Established in 1985,

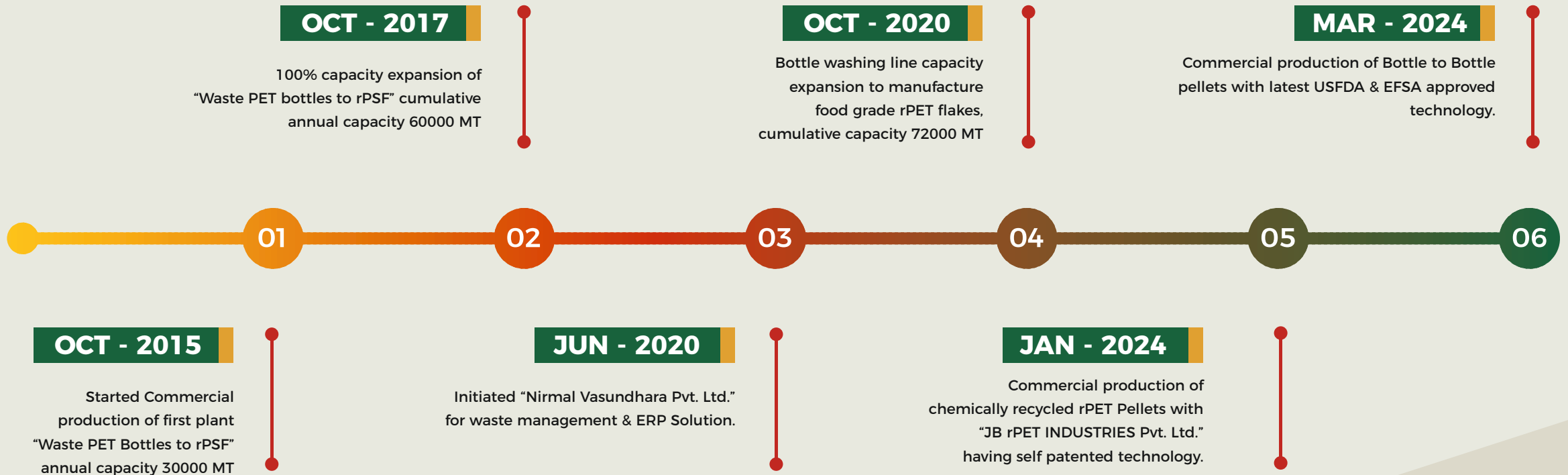
**JAY BHARAT GROUP** have diversified business portfolio. With more than three decades of experience, JB group have forayed into:

- ◆ Garments, suits, sarees & ethnic wear manufacturing.
- ◆ Processing, dyeing & printing on all kinds of fabrics and yarn.
- ◆ Post-consumer plastics recycling, waste management & EPR services.
- ◆ Polyester Monofilament yarn & Nylon FDY Yarn Spinning & carpet yarn Manufacturing
- ◆ Waste Paper Recycling.
- ◆ Manufacturing of caps for water & Cold drink bottles.
- ◆ Cocoon manufacturing for back yarn & Schiffli embroidery machine.
- ◆ Sustainable packaging manufacturing (PET SHEET & PET STRAP).
- ◆ Green Power Generation.

## MILESTONES

- ◆ Annual Group turnover **2000 CR+**
- ◆ Employment generation **4000+ People**
- ◆ Windpower generation **27.50 MW**
- ◆ Solar power generation **7.00 MW**

# RECYCLE JOURNEY



## OUR FLAGSHIP COMPANY: JB ECOTEX LTD.



- ◆ Commenced in October 2015, J B ECOTEX LIMITED was set with vision of cleaner environment.
- ◆ Recycling 12 million Waste PET Bottles every day accounting to 4.3 Billion waste PET Bottles per annum. Till 31st March 2023, recycled more than 19 Billion of waste PET Bottles and saved approx. 400000 tons of plastic waste going into landfill.
- ◆ Producing High Tenacity Recycle Polyester Staple Fiber and rPET FLAKES.
- ◆ Cumulative production capacity 72000 MT PER ANNUM (rPET FLAKES & RPSF).
- ◆ 50% required power for production is being met from renewable resources ensuring a sustainable approach.

OEKO-TEX®  
CONFIDENCE IN TEXTILES



Certified company as well products are REACH compliant.

**JB rPET**   
UPCYCLING WASTE INNOVATIVELY

## JB rPET INTRODUCTION



- ◆ A circular economy wherein every waste PET bottle & polyester yarn is upcycled and transformed into a valuable PET product by the top Recycled PET manufacturer in India.
- ◆ The technology adopted for upcycling is **Chemical Recycling** technology.
- ◆ Our manufacturing capability is **24000** MT per annum of premium grade rPET pellets.
- ◆ We are having a recycling impact of more than 5 million waste PET bottles every day accounting to 2 billion bottles per annum.
- ◆ Our finished rPET resins are used for
  1. Semi dull pellets - POY / DTY / FDY filament yarn application.
  2. Super bright pellets - BoPET film grade application.

## TECHNOLOGY

- ◆ The technology is in house developed chemical recycling technology.
- ◆ The quality of finished product from this technology will be at par to virgin quality.
- ◆ We are adapting special washing technique to remove surface impurities.



- ◆ The process ensure effective depolymerization at lesser temperatures & lesser holding time. This enhances the product quality.
- ◆ The process will result better color value of rPET Resins when compared to other recycled PET Resins.
- ◆ The process adopts unique filtration technology with less than 5 micron filtration of polymer melt resulting in removal of entire suspended impurities.

## PROCESS FLOW

**1** Waste Bottle Feedstock

**2** Sorting, Crushing & Washing Process

**3** rPET FLAKES

**4** Washing Reactor for flakes

**5** Depolymerization Process

**6** Filtration Process (Effective < 4 Micron)

**7** Monomers / Oligomers

### CHEMICAL RECYCLING TECHNOLOGY

**8** Polymerization Process

**9** Final Polymer Pelletization

**10** rPET PELLETS

**THANK  
YOU**