

2014

India Recycling PET Market Outlook to 2019

Growth Led by Inclining PET Bottle
 Availability and Production Capacity

TABLE OF CONTENTS

- 1. India PET Market Overview
- 1.1. India PET Market Size by Volume, FY'2009-FY'2014
- 2. India Recycling PET Market Introduction
- 2.1. India Recycling PET Market Size, FY'2009-FY'2014
- 2.1.1. By Value, FY'2009-FY'2014
- 2.1.2. By Volume, FY'2009-FY'2014
- 2.2. Business Model of Recycling PET Industry
- 2.3. India Recycling PET Market Value Chain and Recycling Process
- 2.4. India Recycling PET Market Segmentation by Types of Products (PET Staple Fiber, Polyester Sheet and PET Straps), FY'2009-FY'2014
- 3. India Polyester Staple Fiber Market Introduction
- 3.1. India Polyester Staple Fiber Market Size, FY'2009-FY'2014
- 3.1.1. By Revenue, FY'2009-FY'2014
- 3.1.2. By Production Volume, FY'2009-FY'2014
- 3.1.3. By Domestic Consumption, FY'2009-FY'2014
- 3.1.4. By Capacity Utilization Rate, FY'2009-FY'2014
- 3.2. India Polyester Staple Fiber Market Value Chain Analysis and Process Flow
- 3.3. India Recycled Polyester Staple Fiber Market Introduction
- 3.4. India Recycled Polyester Staple Fiber Market Size, FY'2009-FY'2014
- 3.4.1. By Revenue, FY'2009-FY'2014
- 3.4.2. By Production Volume, FY'2009-FY'2014
- 3.5. India Recycled Polyester Staple Fiber Market Segmentation by types of Products (Solid PSF and Hollow PSF), FY'2009-FY'2014
- 3.5.1. India Recycled Solid Polyester Staple Fibre Market Segmentation by End User Industries, FY'2014



- 3.5.2. India Recycled Hollow Polyester Staple Fibre Market Segmentation by End User Industries, FY'2014
- 3.6. India Polyester Staple Fiber External Trade, FY'2009-FY'2014
- 3.6.1. By Export Volume, FY'2009-FY'2014
- 3.6.2. By Import Volume, FY'2009-FY'2014

Import Duty on Polyester Staple Fiber

- 3.7. India Polyester Staple Fiber Industry Growth Drivers
- 3.8. Market Share of Major Players in Recycled Polyester Staple Fiber Market, FY'2009-FY'2014
- 3.9. India Recycled Polyester Staple Fiber Market Competitive Landscape
- 4. India Polyester Sheet/Film Market Introduction
- 4.1. India Polyester Sheet/Film Market Size, FY'2009-FY'2014
- 4.1.1. By Revenue, FY'2009-FY'2014
- 4.1.2. By Production Volume, FY'2009-FY'2014
- 4.2. India Polyester Sheet/Film Market Value Chain Analysis
- 4.3. India Recycled Polyester Sheet/Film Market Introduction and Size, FY'2009-FY'2014
- 4.4. India Recycled Polyester Sheet/Film Market Segmentation By End User Industries, FY'2014
- 4.5. India Polyester Sheet/Film Market Segmentation by Large scale and Small Scale Players, FY'2010-FY'2014
- 4.6. India Recycled Polyester Sheet Industry Growth Drivers
- 4.7. India Polyester Sheet Market External Trade, FY'2009-2014
- 4.7.1. By Export Volume, FY'2009-FY'2014
- 4.7.2. By Import Volume, FY'2009-FY'2014

Import Duty on Polyester Sheet

- 4.8. Market Share of Major Players in Recycled Polyester Sheet/Film Market, FY'2010-FY'2014
- 4.9. India Recycled Polyester Sheet/Film Market Competitive Landscape



- 5. India Polyester Strap Market Introduction
- 5.1. India Polyester Strap Market Size, FY'2009-FY'2014
- 5.1.1. By Revenue, FY'2009-FY'2014
- 5.1.2. By Production Volume, FY'2009-FY'2014
- 5.1.3. By Polyester Strap Exports, FY'2009-FY'2014
- 5.2. India Polyester Strap Market Value Chain
- 5.3. India Recycled Polyester Strap Market Size, FY'2009-FY'2014
- 5.3.1. by Value, FY'2009-FY'2014
- 5.3.2. By Recycled Polyester Strap Production Volume, FY'2009-FY'2014
- 5.4. India Recycled Polyester Strap Market Segmentation by End User Industries, FY'2014
- 5.5. India's Recycled Polyester Strap Market Segmentation by Organized and Unorganized sector, FY'2014
- 5.6. India Recycled Polyester Strap Industry Growth Drivers
- 5.7. Market Share of Major Players in India Recycled Polyester Strap Market, FY'2014
- 5.8. India Recycled Polyester Strap Market Competitive Landscape
- 6. India Recycling PET Industry SWOT Analysis
- 7. Required Investment for Establishing a Recycling PET Waste Plant in India
- 8. Government Role in India's Recycling PET Market

Excise Duty on Recycled Polyester Fiber

Incentives to Augment Exports

Regulations Pertaining to Polyester Sheets

8.1. Regulations Regarding Setting up Recycling PET Plant

FDA compliances

European Regulations

Bureau of Indian Standards (BIS)

Small Scale Industries (SSI) Registration

Other Approvals



- 9. Trends and Developments in India's Recycling PET Market
- 10. Company Profile
- 10.1. Reliance Industries
- 10.1.1. Business Overview
- 10.1.2. Business Strategies
- 10.1.3. Financial Performance, FY'2009-FY'2014
- 10.2. Ganesha Ecosphere
- 10.2.1. Business Overview
- 10.2.2. Business Strategies
- 10.2.3. Financial Performance, FY'2009-FY'2014
- 10.3. Indo Rama Synthetics
- 10.3.1. Business Overview
- 10.3.2. Business Strategies
- 10.3.3. Financial Performance, FY'2009-FY'2014
- 10.4. Arora Fibers
- 10.4.1. Business Overview
- 10.4.2. Business Strategies
- 10.4.3. Financial Performance, FY'2009-FY'2014
- 10.5. Sun City Synthetics
- 10.5.1. Business Overview
- 10.5.2. Business Strategies
- 10.5.3. Financial Performance, FY'2009-FY'2014
- 10.6. Jindal Poly Films
- 10.6.1. Business Overview
- 10.6.2. Business Strategies
- 10.6.3. Financial Performance, FY'2009-FY'2014



- 10.7. Garware Polyester
- 10.7.1. Business Overview
- 10.7.2. Business Strategies
- 10.7.3. Financial Performance, FY'2009-FY'2014
- 11. India Recycling PET Market Future Outlook and Projections, 2014-2018
- 11.1. Cause and Effect Relationship in India PET Recycling Market
- 12. Macroeconomic Factors in India Recycling PET Industry, FY'2009-FY'2019
- 12.1. PET Resin Demand, FY'2009-FY'2019
- 12.2. Per Capita Consumption of PET in India, FY'2009-FY'2019
- 12.3. Polyester Production in India, FY'2009-FY'2019
- 12.4. Municipal Solid Waste in India, FY'2009-FY'2019
- 13. Appendix
- 13.1. Market Definitions
- 13.2. Abbreviations
- 13.3. Research Methodology

Data Collection Methods

Approach

Variables (Dependent and Independent)

Multi Factor Based Sensitivity Model

Final Conclusion

13.4. Disclaimer



LIST OF FIGURES

- Figure 1: India Recycling PET Market Size on the Basis of Revenue in INR Million, FY'2009-FY'2014
- Figure 2: India Recycling PET Market Size on the Basis of Production Volume in Tons, FY'2009-FY'2014
- Figure 3: Business Model for the Sourcing of Recycling PET Bottle in India
- Figure 4: India's Recycling PET Market Process Flow Chart
- Figure 5: India Recycling Market Segmentation by Types of Products on the Basis of Revenue Contribution in Percentage (%), FY'2009-FY'2014
- Figure 6: India Recycling Market Segmentation by Types of Products on the Basis of Production Contribution in Percentages, FY'2009-FY'2014
- Figure 7: India PET Staple Fiber Market Size on the Basis of Revenues in INR Million, FY'2009-FY'2014
- Figure 8: India PET Staple Fiber Market Size on the Basis of Production Volume in Tons, FY'2009-FY'2014
- Figure 9: India PET Staple Fiber Market on the Basis of Consumption in Tons, FY'2009-FY'2014
- Figure 10: India PET Staple Fiber Market Capacity Utilization Rate in Percentage (%), FY'2009-FY'2014
- Figure 11: India PET Staple Fiber Value Chain Analysis
- Figure 12: India PET Staple Fiber Manufacturing Process Flow
- Figure 13: India Recycled PET Staple Fiber Market on the Basis of Revenue in INR Million, FY'2009-FY'2014
- Figure 14: India Recycled PET Staple Fiber Market on the Basis of Production in Tons, FY'2009-FY'2014
- Figure 15: India Recycled PET Staple Fiber Market Segmentation on the Basis of Production in Percentage (%), FY'2009-FY'2014
- Figure 16: India Recycled Solid Polyester Staple Fibre Market Segmentation by End Users on the Basis of Contribution in Percentage (%), FY'2014



- Figure 17: India Recycled Hollow Polyester Staple Fibre Market Segmentation by End Users on the Basis of Contribution in Percentage (%), FY'2014
- Figure 18: India PET Staple Fiber Market Export Volume in Tons, FY'2009-FY'2014
- Figure 19: India PET Staple Fiber Market Import Volume in Tons, FY'2009-FY'2014
- Figure 20: India Recycling PET Staple Fiber Market Share on the Basis of Production Contribution in Percentage (%), FY'2009-FY'2014
- Figure 21: India PET Sheet Market Size on the Basis of Revenue in INR Million, FY'2009-FY'2014
- Figure 22: India PET Sheet Market Size on the Basis of Production in Tons, FY'2009-FY'2014
- Figure 23: India PET Sheet Value Chain Analysis
- Figure 24: India Recycled PET Sheet Market Size on the Basis of Revenue in INR Million, FY'2009-FY'2014
- Figure 25: India Recycled PET Sheet Market Size on the Basis of Production Volume in Tons, FY'2009-FY'2014
- Figure 26: India PET Film Market Segmentation by End Users on the Basis of Contribution in Percentage (%), FY'2014
- Figure 27: India PET Sheet Market Segmentation by Large Scale and Small Scale Players on the Basis of Revenue Contribution in Percentage (%), FY'2010-FY'2014
- Figure 28: India PET Sheet Market Export Volume in Tons, FY'2009-FY'2014
- Figure 29: India PET Sheet Market Import Volume in Tons, FY'2009-FY'2014
- Figure 30: India PET Sheet Market Share on the Basis of Revenue Contribution in Percentage (%), FY'2010-FY'2014
- Figure 31: India PET Strap Market Size on the Basis of Revenue in INR Million, FY'2009-FY'2014
- Figure 32: India PET Strap Market Size on the Basis of Production in tons, FY'2009-FY'2014
- Figure 33: India PET Strap Market Export Volume in Tons; FY'2009-FY'2014
- Figure 34: India Polyester Strap Industry Value Chain Analysis
- Figure 35: India Recycled PET Strap Market Size on the Basis of Revenues in INR Million, FY'2009-FY'2014



- Figure 36: India Recycled PET Strap Market Size on the Basis of Production in Tons, FY'2009-FY'2014
- Figure 37: India PET Strap Market Segmentation by End users on the Basis of Contribution in Percentage (%), FY'2014
- Figure 38: India Recycled PET Strap Market Segmentation by Organized and Unorganized Sector on the Basis of Revenue Contribution in Percentage (%), FY'2014
- Figure 39: Market Share of Major Players in India Recycled PET Straps Market in Percentage (%), FY'2014
- Figure 40: Reliance Industries PET Staple Fiber Revenues in INR Million, FY'2009-FY'2014
- Figure 41: Reliance Industries PET Staple Fiber Market Production in Tons, FY'2009-FY'2014
- Figure 42: Ganesha Ecosphere Limited Revenues from PET Staple Fiber Market in INR Million, FY'2009-FY'2014
- Figure 43: Ganesha Ecosphere Limited PET Staple Fiber Production in Tons, FY'2009-FY'2014
- Figure 44: Indorama Synthetics Revenues from the Sale of PET Staple Fiber Market in INR Million, FY'2009-FY'2014
- Figure 45: Indorama Synthetics PET Staple Fiber Market Production in Tons, FY'2009-FY'2014
- Figure 46: Arora Fiber Revenues from the Sale of PET Staple Fiber in INR Million, FY'2009-FY'2014
- Figure 47: Sun City Synthetics Consolidated Revenues in INR Million, FY'2009-FY'2014
- Figure 48: Jindal Poly Films Revenues from the Sale of PET Sheet/Film in INR Million, FY'2009-FY'2014
- Figure 49: Garware Polyester Revenue from the Sale of PET Sheet/Film in INR Million, FY'2009-FY'2014
- Figure 50: Garware Polyester Revenue Segmentation on the Basis of Geography from Domestic and Overseas Market in INR Million, FY'2009-FY'2014
- Figure 51: India's Recycling PET Market Future Projections on the Basis of Revenues in INR Million, FY'2015-FY'2019
- Figure 52: PET Resin Demand in India in Million Tons, FY'2009-FY'2019
- Figure 53: Per Capita Consumption of PET in India in Kilograms, FY'2008-FY'2018
- Figure 54: Polymer Production in India in Million Tons, FY'2009-FY'2019



Figure 54: Municipal Solid Waste in India in Million Tons, FY'2009-FY'2019



LIST OF TABLES

- Table 1: India PET Industry Market Size on the basis of Production Volume in Kilo Tons, FY'2012-FY'2014
- Table 2: India Recycling Market Segmentation by Types of Products on the Basis of Revenue Contribution in INR Million, FY'2009-FY'2014
- Table 3: India Recycling Market Segmentation by Types of Products on the Basis of Production Contribution in Tons, FY'2009-FY'2014
- Table 4: India Recycled PET Staple Fiber Market Segmentation on the Basis of Production in Tons, FY'2009-FY'2014
- Table 5: India Recycled Solid Polyester Staple Fibre Market Segmentation by End Users on the Basis of Production Contribution in Tons, FY'2014
- Table 6: India Recycled Hollow Polyester Staple Fibre Market Segmentation by End Users on the Basis of Production Contribution in Tons, FY'2014
- Table 7: India PET Staple Fiber Market Import Duty Structure in Percentage Terms (%), FY'2014
- Table 8: India Recycling PET Staple Fiber Market Share on the Basis of Revenues in INR Million, FY'2009-FY'2014
- Table 9: Competitive Landscape of Major Players operating in Recycled Polyester Staple Fiber Market in India
- Table 10: India Recycled PET Film Market Segmentation by End Users on the Basis of Production Contribution in Tons, FY'2014
- Table 11: India PET Staple Fiber Market Share on the Basis of Revenues in INR Million, FY'2010-FY'2014
- Table 12: India PET Sheet Market Import Duty Structure in Percentage Terms (%), FY'2014
- Table 13: India Recycled PET Strap Market Share on the Basis of Revenues in INR Million, FY'2014
- Table 14: Competitive Landscape of Major Players operating in Polyester Sheet/Film Market in India
- Table 15: India Recycled PET Strap Market Segmentation by End Users on the Basis of Consumption in Tons, FY'2014



- Table 16: India Recycled PET Strap Market Segmentation by Organized and Unorganized Sector on the Basis of Revenue in INR Million, FY'2014
- Table 17: India Recycled PET Strap Market Share on the Basis of Revenues in INR Million, FY'2014
- Table 18: Competitive Landscape of Major Players operating in Recycled Polyester Strap Market in India
- Table 19: Required Parameters for the Establishment of a PET Waste Recycling Plant
- Table 20: Cost Structure for the Establishment of a PET Recycling Plant
- Table 21: Cost Structure for the Establishment of a PET Bottle-Fiber, PET Bottle-Bottle, Pet Bottle-Sheet and PET Bottle-Strap Plant in INR Million
- Table 22: India's Recycling PET Market Future Projections of Market Segmentation on the Basis of Revenues in INR Million, FY'2015-FY'2019
- Table 23: Cause and Effect Relationship Analysis between Industry Factors and Expected PET Recycling Market Prospects in India
- Table 24: Correlation Matrix of India Recycling PET Market
- Table 25: Regression Coefficients Output of India's Recycling PET Market



EXECUTIVE SUMMARY

PET Bottle Availability and Production Capacity" provides a comprehensive analysis of the of the various aspects such as market size, segmentation by end uses and future projections of the Recycled Polyester staple Fibre, Polyester sheets/Films and Polyester straps. This report also offers prevalent trends and developments in India Recycling PET Industry, Government regulations, growth drivers and SWOT analysis of the Industry. The report also covers the market share of major players operating in India recycling industry for each particular segment. Moreover, the report also provides insights on the typical required investment in setting up a recycling unit taken all the possible factors into consideration. It also includes information on the major macro-economic indicators affecting the market and future outlook of the recycling PET Industry in India.

The concern for Recycled PET (RPET) has escalated in the recent years. PET bottles, which form the major market of PET packaging resin (94%), are the most important from the point of recycling. More than 90% of PET is consumed in food packaging with drinks/beverages forming almost 80% of the food packaging segment. Since drinks and beverages are consumed mostly in residential houses, railway stations, restaurants, entertainment venues, airports and other public places, the importance of organized collection and recycling of post-consumer PET bottles needs to be over emphasized.

It has been witnessed that the recycling of PET has been widely growing in India majorly during the last couple of years. Besides the markets for bottle-to-bottle recycling, more and more of PET are being used in the manufacture of fibers, PET sheets and PET straps. Currently, it has been observed that the textile fibers and filaments industries account for above ~% of the overall recycled polyester demand. Further growth in this segment is limited owing to lower profit margins, which are augmenting the usage of recycled PET into the food and nonfood containers, industrial yarn, mono filaments, strapping, film, sheet, and building materials such as foam boards which are becoming the targeted end markets for recycled PET flakes.

India Recycling PET Industry includes Recycled PET Staple Fibre, Recycled PET straps and Recycled PET Sheets/Films. In FY'2013, driven by the growing demand for PET flakes as well as surge in the production of fibers and sheets, has increased the recycled PET market revenues by ~% compared to FY'2012. This positioned the market revenues at INR ~ million, which escalated in the successive year to INR ~ million, by growing at an annual growth rate of 29.9% relative to FY'2013.

The recycling PET industry in India has been largely dominated by the PET Staple fiber segment which contributed massive share of ~% in the overall revenues of the recycling industry during



FY'2014. The staple fiber segment has traditionally dominated the recycling PET industry both in terms of production volume and revenue. In terms of revenues, Polyester sheet has been the second largest market of the recycled PET industry which contributed a nominal share of ~% during FY'2014. The reason for contributing a low share has been primarily due to PET sheets being a quality sensitive product wherein the producers largely use virgin polyester in order to manufacture PET sheets/films. PET Straps has been the third largest market of recycled PET Industry in terms of revenues, while it has been the second largest market in terms of production volume. PET Straps contributed a smaller share of ~% during FY'2014 due to the fact that the production of PET strap has been relatively lower.

The recycling PET industry in the future is anticipated to follow the same momentum by growing at a sizeable CAGR of ~% during the period FY'2014-FY'2019 and will post the sales worth INR ~ million by FY'2019. Recycled Polyester Staple Fiber (RPSF) market in India during the year FY'2014 has been dominated by Reliance Industries that commanded a market share of ~% with the total RPSF sales registered at ~ Tons during FY'2014

KEY TOPICS COVERED IN THE REPORT

- The market size of the India PET market
- Value Chain Analysis of Recycling PET Market
- The market size of the India Recycling PET market
- Market segmentation of the Recycling PET market on the basis of types of products.
- The market size of the PET Staple Fibre, Recycled PET Staple Fibre, PET Sheets, Recycled PET Sheets, Recycled PET Straps
- Trends and Development in the India Recycling PET market
- Growth Drivers for each type of Product
- End user Applications for each type of Product
- SWOT Analysis of India Recycling PET market
- Required Investment in setting a recycling PET waste plant
- Competitive landscape and detailed company profiles of the major manufacturers of recycling PET market in India.
- Future outlook and projections of the India Recycling PET Market recycled polyester staple Fibre, recycled Polyester straps and recycled Polyester sheets on the basis of revenues in the India.

