

# Biodegradable Plastics Market by Type (PLA, Starch Blends, PBAT, PHA, PBS), End-Use Industry (Packaging, Consumer Goods, Textiles, Agriculture & Horticulture), and Region- Global Forecast to 2029

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#### **Report description:**

The Biodegradable plastics market size is projected to grow from USD 12.92 billion in 2024 to USD 33.52 billion by 2029, registering a CAGR of 21.3% during the forecast period in terms of value. The global biodegradable plastics market is witnessing growth due to its versatile properties and it is also widely used in various industries due to its exceptional properties. Furthermore, biodegradable plastics are required for the application in various end use industries like packaging, consumer goods, textiles, agriculture & horticulture, which fuels the need for biodegradable plastics.

"PBAT type is projected to be the third fastest growing type in terms of value."

PBAT type is projected to be the third fastest growing type in the biodegradable plastics market due to several factors. As the two major monomers that the copolymer PBAT is made of are butylene adipate and terephthalate. The stacking together of the monomers yields it certain unique properties, namely biodegradability and flexibility. It is completely biodegradable and degrades readily in the presence of natural microorganisms and bacteria. Entombed in soil, it degrades completely with no toxic residues. PBAT is often used in biodegradable bags that add flexibility, fast biodegradability and acceleration of the rate of compostability in order to comply with regulations on compost. PBAT can also be blended or co-extruded with other polymers for better performances and properties. Blending PBAT with other biodegradable polymers, such as polylactic acid (PLA) or starch, can improve its mechanical strength, biodegradability, and processability. These blends offer customized solutions for specific applications. It is fully biodegradable (compostable) and can be processed on conventional blown film equipment used for polyethylene. PBAT has also been investigated as a toughening agent for PLA.

"Agriculture & Horticulture end use industry is expected to be the third fastest growing end use industry for forecasted period in

## terms of value."

Agriculture & Horticulture end use industry is expected to be the third fastest growing end use industry for forecasted period in terms of value. As biodegradable plastics are used in the making of mulches, seeding strips, and tapes in agriculture and horticulture. Its several advantages include better crop productions and environmental resource saving. It makes the soil healthier and more fertile when biodegradable plastics are used in agriculture and horticulture. Organic matters are produced by the breakdown of plastics and so improve the water holding capacity and availability of nutrients in the soil. This promotes healthy growth for these plants while avoiding many synthetic fertilizers and amendments of the soil. High disposal costs of traditional mulch, for example, promote the use of starch-based plastics in this industry. Biodegradable plastics are widely used by countries such as Germany, France, the US, China, and Mediterranean countries such as Spain and Israel, where agriculture is more intensive.

"Europe is estimated to be the second fastest growing region in terms of value for the forecasted period." Europe region is expected to be the second fastest growing region in forecasted period in terms of value. As Germany, Italy, France, Spain, and the UK are the major European biodegradable plastics market countries. This region is likely to see an increase in growth in the market for biodegradable plastics as the countries here are heavily investing into new packaging technologies to meet customer demands and requirements. It has a developed industrial base in developed economies such as the United Kingdom, France, Italy, Spain, and Germany. Europe accounts for a significant market share of the biodegradable plastic market, due to increased consumer requirement for ecologically friendly packaging materials. These governments of the European nations encourage the use of biodegradable plastics by establishing the fundamental infrastructure for composting such materials.

In-depth interviews were conducted with Chief Executive Officers (CEOs), marketing directors, other innovation and technology directors, and executives from various key organizations operating in the biodegradable plastics market, and information was gathered from secondary research to determine and verify the market size of several segments.

- By Company Type: Tier 1 - 40%, Tier 2 - 30%, and Tier 3 - 30%

- By Designation: C Level Executives- 20%, Directors - 10%, and Others - 70%

- By Region: North America - 22%, Europe - 22%, APAC - 45%, ROW -11%

The Biodegradable plastics market comprises major players such as NatureWork LLC (US), BASF SE (Germany), TotalEnergies Corbion (Netherlands), Mitsubishi Chemical Group Corporation. (Japan), Biome Bioplastics (UK), Plantic (Australia), FKuR (Germany), Danimer Scientific (US), TORAY INDUSTRIES, INC. (Japan), and Novamont (Italy). The study includes in-depth competitive analysis of these key players in the biodegradable plastics market, with their company profiles, recent developments, and key market strategies.

# Research Coverage

This report segments the market for biodegradable plastics market on the basis of type, end use industry, and region, and provides estimations for the overall value of the market across various regions. A detailed analysis of key industry players has been conducted to provide insights into their business overviews, products & services, key strategies, new product launches, expansions, and mergers & acquisition associated with the market for biodegradable plastics market.

## Key benefits of buying this report

This research report is focused on various levels of analysis - industry analysis (industry trends), market ranking analysis of top players, and company profiles, which together provide an overall view on the competitive landscape; emerging and high-growth segments of the biodegradable plastics market; high-growth regions; and market drivers, restraints, opportunities, and challenges.

The report provides insights on the following pointers:

-[Market Penetration: Comprehensive information on the biodegradable plastics market offered by top players in the global biodegradable plastics market.

-[Analysis of drivers: (Government focus on new policies and regulations, Consumers with strong purchasing power and a high degree of environmental awareness, High growth in applications in end-use industries) restraints (Volatility in cost of raw materials, Higher price of biodegradable plastics as compared to conventional plastics), opportunities (Increasing use of biodegradable plastics in packaging end use industry, Higher growth in emerging economies of Asia Pacific) and challenges (High price and complex production process, Less durability of biodegradable plastics as compared to traditional plastics) -[Product Development/Innovation: Detailed insights on upcoming technologies, research & development activities, and new product launches in the biodegradable plastics market.

- Market Development: Comprehensive information about lucrative emerging markets - the report analyzes the markets for biodegradable plastics market across regions.

- Market Capacity: Production capacities of companies producing biodegradable plastics are provided wherever available with upcoming capacities for the biodegradable plastics market.

- Competitive Assessment: In-depth assessment of market shares, strategies, products, and manufacturing capabilities of leading players in the biodegradable plastics market.

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