+357 96 030922
info@marketpublishers.com

Biodegradable Plastic Market - Global Industry Size, Share, Trends, Competition, Opportunity and Forecast, Segmented By Type (Starch Blends, Polylactic Acid (PLA), Polybutylene Adipate Terephthalate (PBAT), Polyhydroxyalkanoate (PHA), Others), By End User (Packaging, Consumer Goods, Textiles, Others), By Region & Competition, 2021-2031F

https://marketpublishers.com/r/BB35CB71EF4FEN.html
Date: January 2026
Pages: 181
Price: US$ 4,500.00 (Single User License)
ID: BB35CB71EF4FEN

Abstracts

The Global Biodegradable Plastic Market is projected to expand from USD 3.42 Billion in 2025 to USD 4.91 Billion by 2031, reflecting a CAGR of 6.21%. These polymeric materials are designed to break down into water, biomass, and carbon dioxide through the enzymatic action of microorganisms. The industry's growth is fundamentally anchored by strict government legislation aimed at single-use waste and an increasing corporate dedication to circular economy principles. Unlike temporary market fads, these structural drivers necessitate long-term compliance and strategic operational adjustments throughout supply chains. According to European Bioplastics, global production capacity for bioplastics reached approximately 2.47 million tonnes in 2024, with the packaging sector accounting for the largest share at 45 percent.

However, the sector encounters significant hurdles due to production costs that remain high compared to traditional petroleum-based alternatives. This economic gap creates obstacles for price-sensitive manufacturers and restricts widespread adoption in sectors where cost is critical. Additionally, the scarcity of specialized industrial composting facilities often hinders these materials from decomposing as designed, effectively slowing their broader market integration and preventing the realization of their complete

+357 96 030922
info@marketpublishers.com

environmental benefits.

Market Driver

The enforcement of strict government regulations and bans on conventional single-use plastics serves as a primary engine for the structural growth of the biodegradable plastics sector. Legislative frameworks worldwide are evolving from voluntary guidelines to mandatory requirements, forcing manufacturers to replace fossil-fuel-based polymers with compostable substitutes. This regulatory pressure is especially pronounced in major manufacturing centers where policy incentives are rapidly expanding production capabilities to adhere to new environmental standards. For instance, CHEManager Online reported in January 2025 that policy incentives in China are propelling the bio-based polymer industry toward a projected output of 2.53 million tons by 2026, increasing from 765,000 tons in 2023. Such state-level actions effectively mitigate the risks associated with the high capital expenditures needed for biopolymer manufacturing, ensuring industrial capacity matches the mandated decrease in virgin plastic use.

Concurrently, corporate pledges to carbon neutrality and circular economy models are fueling significant investments in production infrastructure. Leading material science firms are enlarging their operational footprints to guarantee supply chains for global consumer brands transitioning away from petrochemical packaging. According to CHEManager Online in January 2025, Emirates Biotech announced plans in December 2024 to establish a new biopolymer facility in the United Arab Emirates with an annual capacity of 160,000 tons, establishing the region as a pivotal supplier of polylactic acid (PLA). This strategic expansion highlights a wider industry movement toward mass adoption and supply chain resilience. Reflecting this upward trend, European Bioplastics reported in December 2024 that global bioplastics production capacity is anticipated to rise to roughly 5.73 million tonnes by 2029, demonstrating the sector's strong response to these combined regulatory and demand-side pressures.

Market Challenge

The elevated cost of production compared to conventional petroleum-based plastics establishes a formidable economic obstacle that restricts the growth of the biodegradable plastic market. Manufacturers within price-sensitive industries, especially in the high-volume packaging sector, operate on slender profit margins that cannot accommodate the price premium linked to these advanced materials. Unlike established fossil-fuel plastics, which benefit from extensive economies of scale and decades of

+357 96 030922
info@marketpublishers.com

supply chain optimization, biodegradable alternatives remain expensive to manufacture, making them commercially impractical for widespread use in cost-critical markets.

This financial discrepancy severely curtails the industry's capacity to evolve from niche segments to mainstream acceptance. The prohibitive pricing confines demand to specialized, eco-conscious consumers, thereby inhibiting the volume growth required to reduce unit costs. The consequence of this challenge is apparent in the sector's minimal global presence. According to European Bioplastics, bioplastics accounted for approximately 0.5 percent of the nearly 414 million tonnes of global plastic production in 2024. This low level of market penetration highlights how production costs directly hinder the industry's growth potential and delay its integration into the wider manufacturing landscape.

Market Trends

The commercialization of algae and seaweed-based biopolymers is rising as a vital trend to separate packaging supply chains from freshwater consumption and terrestrial land use. Unlike starch-based incumbents that vie with food crops, marine feedstocks present a regenerative option that actively sequesters carbon during growth while offering superior barrier qualities for moisture and grease resistance. This segment is swiftly moving from research and development to scalable manufacturing, demonstrated by substantial capital investment in firms creating home-compostable barrier films that require no chemical additives. According to the Maritime Forum's February 2025 article 'Seven Seaweed Trends That Shaped 2024 and Beyond', companies specializing in seaweed-derived bioplastics sustained strong investment momentum throughout 2024, with packaging innovator Notpla securing $26.8 million to broaden its portfolio of biodegradable films and coatings.

Simultaneously, the market is undergoing a rapid structural transition toward Polyhydroxyalkanoates (PHA) as the material of choice for applications necessitating high thermal stability and marine biodegradability. Manufacturers are increasingly preferring this bacterially synthesized polyester over PLA for functional packaging because it decomposes efficiently in natural settings without the need for specialized industrial composting infrastructure. This technical advantage is propelling a massive increase in installed manufacturing capacity as the material approaches mainstream commercial availability. As stated in the 'Bioplastics Market Development Update 2024' by European Bioplastics in December 2024, production capacity for PHAs is expected to grow significantly to reach 0.97 million tonnes by 2029, capturing roughly 17 percent of the total global bioplastics market share.

+357 96 030922
info@marketpublishers.com

Key Market Players

Novamont S.p.A.

NatureWorks LLC

Futerro Inc.

Corbion N.V.

BASF SE

Kingfa SCI. & TECH. Co. Limited

Zhejiang Hisun Biomaterials Co. Limited

Danimer Scientific Inc.

Kaneka Corporation

Mitsubishi Chemical Holdings Corporation

Report Scope

In this report, the Global Biodegradable Plastic Market has been segmented into the following categories, in addition to the industry trends which have also been detailed below:

Biodegradable Plastic Market, By Type

Starch Blends

Polylactic Acid (PLA)

Polybutylene Adipate Terephthalate (PBAT)

Polyhydroxyalkanoate (PHA)

+357 96 030922
info@marketpublishers.com

Others

Biodegradable Plastic Market, By End User

Packaging

Consumer Goods

Textiles

Others

Biodegradable Plastic Market, By Region

North America

United States

Canada

Mexico

Europe

France

United Kingdom

Italy

Germany

Spain

Asia Pacific

China

+357 96 030922
info@marketpublishers.com

India

Japan

Australia

South Korea

South America

Brazil

Argentina

Colombia

Middle East & Africa

South Africa

Saudi Arabia

UAE

Competitive Landscape

Company Profiles: Detailed analysis of the major companies present in the Global Biodegradable Plastic Market.

Available Customizations:

Global Biodegradable Plastic Market report with the given market data, TechSci Research offers customizations according to a company's specific needs. The following customization options are available for the report:

Company Information

Detailed analysis and profiling of additional market players (up to five).

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

Contents

+357 96 030922
info@marketpublishers.com

6. NORTH AMERICA BIODEGRADABLE PLASTIC MARKET OUTLOOK

7. EUROPE BIODEGRADABLE PLASTIC MARKET OUTLOOK

+357 96 030922
info@marketpublishers.com

8. ASIA PACIFIC BIODEGRADABLE PLASTIC MARKET OUTLOOK

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

10. SOUTH AMERICA BIODEGRADABLE PLASTIC MARKET OUTLOOK

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

+357 96 030922
info@marketpublishers.com

I would like to order

Product name: Biodegradable Plastic Market - Global Industry Size, Share, Trends, Competition, Opportunity and Forecast, Segmented By Type (Starch Blends, Polylactic Acid (PLA), Polybutylene Adipate Terephthalate (PBAT), Polyhydroxyalkanoate (PHA), Others), By End User (Packaging, Consumer Goods, Textiles, Others), By Region & Competition, 2021-2031F

Product link: https://marketpublishers.com/r/BB35CB71EF4FEN.html

Price: US$ 4,500.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:
info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page https://marketpublishers.com/r/BB35CB71EF4FEN.html