

Biodegradable Polymers Market Report and Forecast 2025-2034

Market Report | 2025-07-28 | 155 pages | EMR Inc.

AVAILABLE LICENSES:

- Single User License \$3599.00
- Five User License \$4249.00
- Corporate License \$5099.00

Report description:

The global biodegradable polymers market value is expected to grow at a CAGR of 21.10% during the period 2025-2034.

Global Biodegradable Polymers Market Growth

Biodegradable polymers, often referred to as biopolymers, are typically sourced from various natural materials. These biopolymers, such as PLA, PHA, and starch, are widely used in plastics due to their lower environmental impact, which further fuels the biodegradable polymers industry growth.

Biodegradability is a feature of polymers independent of their origin and may be changed by making alterations at the molecular level. For example, some polymers are produced from petroleum feedstock but are biodegradable. Biopolymers from renewable feedstock are the most plentiful and commonly available biopolymers.

Global Biodegradable Polymers Market Analysis

Synthetic biopolymers are polymers modified from natural polymers or chemically synthesised from synthetic monomers such that they may undergo natural degradation, without leaving remains harmful to the environment. The biodegradable polymers market trends and dynamics are being driven by the advancement of technology, enabling the creation of synthetic biopolymers such as polycaprolactone (PCL), polyvinyl alcohol (PVOH), polylactic acid (PLA), polyglycolic acid (PGA), and polybutylene succinate (PBS).

The advantages of synthetic biopolymers include the potential to set up a sustainable industry and improvement in properties like high gloss, durability, clarity, flexibility, and tensile strength. These advantages are expected to contribute to the growth of the biodegradable polymers market.

Global Biodegradable Polymers Industry Outlook

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

According to the FAO (2022), in 2020, global agricultural land dedicated to permanent meadows and pastures amounted to 3,182,766.3 thousand hectares, while cropland covered 1,561,667.7 thousand hectares. In Africa, the agricultural landscape in 2020 included 842,097.5 thousand hectares for permanent meadows and pastures and 281,861.5 thousand hectares for cropland. In the Americas, 754,663.5 thousand hectares were used for permanent meadows and pastures, with cropland covering 367,297.3 thousand hectares. Asia reported 1,077,740.0 thousand hectares designated for permanent meadows and pastures and 591,266.3 thousand hectares for cropland in 2020.

Europe's agricultural land usage in 2020 comprised 173,300.0 thousand hectares for permanent meadows and pastures and 288,051.6 thousand hectares for cropland. In 2020, Oceania had 334,965.3 thousand hectares of permanent meadows and pastures, along with 33,191.0 thousand hectares of cropland, which boosted the demand for the biodegradable polymers market.

According to the Italian Trade Agency, in 2018, China imported packaging machinery from Italy valued at USD 196.2 million, while its exports to Italy amounted to USD 22.1 million. In 2019, imports surged to USD 275.5 million with a notable 40.4% growth rate. In 2020, imports were valued at USD 271.6 million, and exports were valued at USD 21.8 million, showing a 29.0% growth rate. The upward trend continued in 2021, with imports rising to USD 279.3 million and a growth rate of 2.8%. Exports also increased, reaching USD 26.2 million, reflecting a 20.2% growth rate and further driving the biodegradable polymers demand growth.

According to the National Health Expenditure (NHE) historical data (1960-2021) and CMS projections (2022-2031), health spending in the United States as a percentage of GDP was 17.6% in 2018. This percentage remained consistent in 2019. In 2020, there was a notable increase, with health spending rising to 19.7% of GDP. CMS projections for 2031 indicate that health spending will represent 19.6% of GDP, further driving the biodegradable polymers industry revenue.

Increasing environmental concerns and regulations are driving demand for sustainable, biodegradable polymers, offering a lucrative biodegradable polymers market opportunity.

- Advances in polymer technology and material science are leading to improved performance and cost-effectiveness of biodegradable polymers.

- Governments and international organizations are providing incentives and support for the development and adoption of eco-friendly materials.

Production costs of biodegradable polymers can be significantly higher than traditional plastics, limiting market competitiveness.

- Market adoption is hindered by a lack of consumer and industry awareness regarding the benefits and applications of biodegradable polymers.

- Some biodegradable polymers may not meet the performance standards required for certain applications, impacting their market viability.

Rising consumer preference for sustainable products offers opportunities for growth in various industries such as packaging and agriculture.

- Continued research and development can lead to cost reductions and enhanced performance of biodegradable polymers.

- Collaborations between companies, research institutions, and governments can accelerate innovation and market penetration.

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

The market faces competition from conventional plastics and other sustainable alternatives, which may affect biodegradable polymers market demand.

- Variability in regulations across regions can complicate market entry and compliance for biodegradable polymers.
- Economic downturns or fluctuations in raw material prices can impact production costs and market stability.

Key Players in the Global Biodegradable Polymers Market and Their Key Initiatives

BASF SE

- Expanded production capacity for biodegradable polymers.
- Introduced ecovio M 2351, a new biodegradable polymer to meet the growing demand of the biodegradable polymers market.

NatureWorks LLC

- Opened new headquarters and advanced biopolymer research facility.
- Announced turn-key compostable coffee pod solution.

Novamont SpA

- Launched Mater-Biopolymer plant, boosting production capacity to capture the biodegradable polymers market opportunities.
- Partnered with Coldiretti, promoting sustainable agriculture.

Total Corbion PLA

- Launched a new 75,000-tonne PLA bioplastics plant in Thailand.
- Introduced a new range of high heat-resistant Luminy PLA resins.

Global Biodegradable Polymers Industry Segmentation

"Global Biodegradable Polymers Market Report and Forecast 2025-2034" offers a detailed analysis of the market based on the following segments:

Market Breakup by Type

- Starch-based Plastics
- Polylactic Acid (PLA)
- Polyhydroxy Alkanoates (PHA)
- Polyesters (PBS, PBAT, and PCL)
- Cellulose Derivatives

Market Breakup by Distribution Channel

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- Agriculture
- Healthcare
- Textile
- Packaging
- Consumer Electronics
- Others

Market Breakup by Region

- North America
- Europe
- Asia Pacific
- Latin America
- Middle East and Africa

Biodegradable Polymers Market Share

Biodegradable polymers are used in surgical implants employed in vascular or orthopaedic surgery and plain membranes. Biodegradable polyesters are extensively employed as porous structures in tissue engineering owing to their good strength and adjustable degradation speed. Further, biodegradable polymers are employed as implantable matrices for controlled release of drugs within the body or as absorbable sutures.

In the automotive sector, PLA is mixed with fibres of kenaf to replace panels of car doors and dashboards. Starch-based polymers are used as additives in tire production to reduce rolling resistance, fuel consumption, and greenhouse gas emissions, further driving the growth of the biodegradable polymers industry.

Leading Companies in the Biodegradable Polymers Market

The companies produce bioplastics, specialising in crafting biopolymers from renewable plant sources. They emphasise sustainable solutions for packaging, textiles, and consumer products, spearheading innovation in the bioplastics sector.

- BASF SE
- NatureWorks LLC
- Novamont SpA
- Total Corbion PLA
- Rodenburg Biopolymers
- Biome Bioplastics Limited
- Others

Biodegradable Polymers Market Report Snapshots

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Biodegradable Polymers□Market Size

Biodegradable Polymers Market Growth

Biodegradable Polymers□Market Analysis

Biodegradable Polymers□Market Share

Biodegradable Polymers□Companies

Table of Contents:

- 1 Executive Summary
 - 1.1 Market Size 2024-2025
 - 1.2 Market Growth 2025(F)-2034(F)
 - 1.3 Key Demand Drivers
 - 1.4 Key Players and Competitive Structure
 - 1.5 Industry Best Practices
 - 1.6 Recent Trends and Developments
 - 1.7 Industry Outlook
- 2 Market Overview and Stakeholder Insights
 - 2.1 Market Trends
 - 2.2 Key Verticals
 - 2.3 Key Regions
 - 2.4 Supplier Power
 - 2.5 Buyer Power
 - 2.6 Key Market Opportunities and Risks
 - 2.7 Key Initiatives by Stakeholders
- 3 Economic Summary
 - 3.1 GDP Outlook
 - 3.2 GDP Per Capita Growth
 - 3.3 Inflation Trends
 - 3.4 Democracy Index
 - 3.5 Gross Public Debt Ratios
 - 3.6 Balance of Payment (BoP) Position
 - 3.7 Population Outlook
 - 3.8 Urbanisation Trends
- 4 Country Risk Profiles
 - 4.1 Country Risk
 - 4.2 Business Climate
- 5 Global Biodegradable Polymers Market Analysis
 - 5.1 Key Industry Highlights
 - 5.2 Global Biodegradable Polymers Historical Market (2018-2024)
 - 5.3 Global Biodegradable Polymers Market Forecast (2025-2034)
 - 5.4 Global Biodegradable Polymers Market by Type

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 5.4.1 Starch-based Plastics
 - 5.4.1.1 Historical Trend (2018-2024)
 - 5.4.1.2 Forecast Trend (2025-2034)
- 5.4.2 Polylactic Acid (PLA)
 - 5.4.2.1 Historical Trend (2018-2024)
 - 5.4.2.2 Forecast Trend (2025-2034)
- 5.4.3 Polyhydroxy Alkanoates (PHA)
 - 5.4.3.1 Historical Trend (2018-2024)
 - 5.4.3.2 Forecast Trend (2025-2034)
- 5.4.4 Polyesters (PBS, PBAT, and PCL)
 - 5.4.4.1 Historical Trend (2018-2024)
 - 5.4.4.2 Forecast Trend (2025-2034)
- 5.4.5 Cellulose Derivatives
 - 5.4.5.1 Historical Trend (2018-2024)
 - 5.4.5.2 Forecast Trend (2025-2034)
- 5.5 Global Biodegradable Polymers Market by Distribution Channel
 - 5.5.1 Agriculture
 - 5.5.1.1 Historical Trend (2018-2024)
 - 5.5.1.2 Forecast Trend (2025-2034)
 - 5.5.2 Healthcare
 - 5.5.2.1 Historical Trend (2018-2024)
 - 5.5.2.2 Forecast Trend (2025-2034)
 - 5.5.3 Textile
 - 5.5.3.1 Historical Trend (2018-2024)
 - 5.5.3.2 Forecast Trend (2025-2034)
 - 5.5.4 Packaging
 - 5.5.4.1 Historical Trend (2018-2024)
 - 5.5.4.2 Forecast Trend (2025-2034)
 - 5.5.5 Consumer Electronics
 - 5.5.5.1 Historical Trend (2018-2024)
 - 5.5.5.2 Forecast Trend (2025-2034)
 - 5.5.6 Others
- 5.6 Global Biodegradable Polymers Market by Region
 - 5.6.1 North America
 - 5.6.1.1 Historical Trend (2018-2024)
 - 5.6.1.2 Forecast Trend (2025-2034)
 - 5.6.2 Europe
 - 5.6.2.1 Historical Trend (2018-2024)
 - 5.6.2.2 Forecast Trend (2025-2034)
 - 5.6.3 Asia Pacific
 - 5.6.3.1 Historical Trend (2018-2024)
 - 5.6.3.2 Forecast Trend (2025-2034)
 - 5.6.4 Latin America
 - 5.6.4.1 Historical Trend (2018-2024)
 - 5.6.4.2 Forecast Trend (2025-2034)
 - 5.6.5 Middle East and Africa
 - 5.6.5.1 Historical Trend (2018-2024)

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 5.6.5.2 Forecast Trend (2025-2034)
- 6 North America Biodegradable Polymers Market Analysis
 - 6.1 United States of America
 - 6.1.1 Historical Trend (2018-2024)
 - 6.1.2 Forecast Trend (2025-2034)
 - 6.2 Canada
 - 6.2.1 Historical Trend (2018-2024)
 - 6.2.2 Forecast Trend (2025-2034)
- 7 Europe Biodegradable Polymers Market Analysis
 - 7.1 United Kingdom
 - 7.1.1 Historical Trend (2018-2024)
 - 7.1.2 Forecast Trend (2025-2034)
 - 7.2 Germany
 - 7.2.1 Historical Trend (2018-2024)
 - 7.2.2 Forecast Trend (2025-2034)
 - 7.3 France
 - 7.3.1 Historical Trend (2018-2024)
 - 7.3.2 Forecast Trend (2025-2034)
 - 7.4 Italy
 - 7.4.1 Historical Trend (2018-2024)
 - 7.4.2 Forecast Trend (2025-2034)
 - 7.5 Others
- 8 Asia Pacific Biodegradable Polymers Market Analysis
 - 8.1 China
 - 8.1.1 Historical Trend (2018-2024)
 - 8.1.2 Forecast Trend (2025-2034)
 - 8.2 Japan
 - 8.2.1 Historical Trend (2018-2024)
 - 8.2.2 Forecast Trend (2025-2034)
 - 8.3 India
 - 8.3.1 Historical Trend (2018-2024)
 - 8.3.2 Forecast Trend (2025-2034)
 - 8.4 ASEAN
 - 8.4.1 Historical Trend (2018-2024)
 - 8.4.2 Forecast Trend (2025-2034)
 - 8.5 Australia
 - 8.5.1 Historical Trend (2018-2024)
 - 8.5.2 Forecast Trend (2025-2034)
 - 8.6 Others
- 9 Latin America Biodegradable Polymers Market Analysis
 - 9.1 Brazil
 - 9.1.1 Historical Trend (2018-2024)
 - 9.1.2 Forecast Trend (2025-2034)
 - 9.2 Argentina
 - 9.2.1 Historical Trend (2018-2024)
 - 9.2.2 Forecast Trend (2025-2034)
 - 9.3 Mexico

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

9.3.1 Historical Trend (2018-2024)	
9.3.2 Forecast Trend (2025-2034)	
9.4 Others	
10 Middle East and Africa Biodegradable Polymers Market Analysis	
10.1 Saudi Arabia	
10.1.1 Historical Trend (2018-2024)	
10.1.2 Forecast Trend (2025-2034)	
10.2 United Arab Emirates	
10.2.1 Historical Trend (2018-2024)	
10.2.2 Forecast Trend (2025-2034)	
10.3 Nigeria	
10.3.1 Historical Trend (2018-2024)	
10.3.2 Forecast Trend (2025-2034)	
10.4 South Africa	
10.4.1 Historical Trend (2018-2024)	
10.4.2 Forecast Trend (2025-2034)	
10.5 Others	
11 Market Dynamics	
11.1 SWOT Analysis	
11.1.1 Strengths	
11.1.2 Weaknesses	
11.1.3 Opportunities	
11.1.4 Threats	
11.2 Porter's Five Forces Analysis	
11.2.1 Supplier's Power	
11.2.2 Buyer's Power	
11.2.3 Threat of New Entrants	
11.2.4 Degree of Rivalry	
11.2.5 Threat of Substitutes	
11.3 Key Indicators for Demand	
11.4 Key Indicators for Price	
12 Value Chain Analysis	
13 Competitive Landscape	
13.1 Supplier Selection	
13.2 Key Global Players	
13.3 Key Regional Players	
13.4 Key Player Strategies	
13.5 Company Profiles	
13.5.1 BASF SE	
13.5.1.1 Company Overview	
13.5.1.2 Product Portfolio	
13.5.1.3 Demographic Reach and Achievements	
13.5.1.4 Certifications	
13.5.2 NatureWorks LLC	
13.5.2.1 Company Overview	
13.5.2.2 Product Portfolio	
13.5.2.3 Demographic Reach and Achievements	

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

- 13.5.2.4 Certifications
- 13.5.3 Novamont SpA
 - 13.5.3.1 Company Overview
 - 13.5.3.2 Product Portfolio
 - 13.5.3.3 Demographic Reach and Achievements
 - 13.5.3.4 Certifications
- 13.5.4 Total Corbion PLA
 - 13.5.4.1 Company Overview
 - 13.5.4.2 Product Portfolio
 - 13.5.4.3 Demographic Reach and Achievements
 - 13.5.4.4 Certifications
- 13.5.5 Rodenburg Biopolymers
 - 13.5.5.1 Company Overview
 - 13.5.5.2 Product Portfolio
 - 13.5.5.3 Demographic Reach and Achievements
 - 13.5.5.4 Certifications
- 13.5.6 Biome Bioplastics Limited
 - 13.5.6.1 Company Overview
 - 13.5.6.2 Product Portfolio
 - 13.5.6.3 Demographic Reach and Achievements
 - 13.5.6.4 Certifications
- 13.5.7 Others

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com

Biodegradable Polymers Market Report and Forecast 2025-2034

Market Report | 2025-07-28 | 155 pages | EMR Inc.

To place an Order with Scotts International:

- ☐ - Print this form
- ☐ - Complete the relevant blank fields and sign
- ☐ - Send as a scanned email to support@scotts-international.com

ORDER FORM:

Select license	License	Price
	Single User License	\$3599.00
	Five User License	\$4249.00
	Corporate License	\$5099.00
		VAT
		Total

*Please circle the relevant license option. For any questions please contact support@scotts-international.com or 0048 603 394 346.

☐ ** VAT will be added at 23% for Polish based companies, individuals and EU based companies who are unable to provide a valid EU Vat Numbers.

Email*	<input type="text"/>	Phone*	<input type="text"/>
First Name*	<input type="text"/>	Last Name*	<input type="text"/>
Job title*	<input type="text"/>		
Company Name*	<input type="text"/>	EU Vat / Tax ID / NIP number*	<input type="text"/>
Address*	<input type="text"/>	City*	<input type="text"/>
Zip Code*	<input type="text"/>	Country*	<input type="text"/>
		Date	<input type="text" value="2026-02-17"/>
		Signature	<input type="text"/>

Scotts International. EU Vat number: PL 6772247784

tel. 0048 603 394 346 e-mail: support@scotts-international.com

www.scotts-international.com