

Biodegradable Packaging Solutions Market Size & Share Analysis - Growth Trends and Forecast (2026 - 2031)

> **Industry:** Sustainable & Biodegradable Packaging (Packaging)
> **Source:** https://www.mordorintelligence.com/industry-reports/gobal-biodegradable-packaging-solutions-market-industry
> **Scraped Date:** 2026-09-17

Executive Market Summary

Market Metric	Details
Base Market Size	USD 117.74 billion
Projected Forecast (2031)	USD 117.74 billion
Growth Rate (CAGR)	6.32 %
Largest Market Region	N/A
Fastest-Growing Region	N/A

Market Visualizations & Infographics

!Major players in Biodegradable Packaging Solutions industry(images/chart_2.png)

!Biodegradable Packaging Solutions Market (2026 - 2031)(images/chart_3.png)

!Biodegradable Packaging Solutions Market: Market Share by Material Type(image s/chart_4.png)

!Biodegradable Packaging Solutions Market: Market Share by End-User Industry(images/chart_5.png)

!Biodegradable Packaging Solutions Market CAGR (%), Growth Rate by Region(images/chart_6.png)

!Biodegradable Packaging Market Concentration(images/chart_7.png)

!Icon(images/chart_8.png)

!footer background image(images/chart_10.png)

!Mordor Intelligence on Facebook(images/chart_12.svg)

!Mordor Intelligence on Pinterest(images/chart_14.svg)

!Mordor Intelligence on Instagram(images/chart_15.svg)

![ESOMAR](images/chart_17.png)

![GPTW](images/chart_19.png)

Comprehensive Research Analysis

Overview Points List Flex 49 Share Feature End

Market Overview

Study Period	2020 - 2031
Market Size (2026)	USD 117.74 Billion
Market Size (2031)	USD 159.97 Billion
Growth Rate (2026 - 2031)	6.32 %

Fastest Growing Market | Asia Pacific |
Largest Market | Europe |
Market Concentration | Medium |
Major Players*Disclaimer: Major Players sorted in no particular order

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Market Overview

Biodegradable Packaging Solutions Market Analysis by Mordor IntelligenceThe biodegradable packaging solutions market size reached USD 117.74 billion in 2026 and is projected to advance to USD 159.97 billion by 2031, reflecting a CAGR of 6.32% over 2026-2031 and confirming the sector's steady upward trajectory. Rising compliance costs for conventional plastics, stronger Extended Producer Responsibility (EPR) laws, and the accelerating pivot by brand owners toward end-of-life design are reinforcing demand across food, beverage, and personal-care value chains. Material innovation, particularly in polylactic acid (PLA) and polyhydroxyalkanoates (PHA), is enhancing process compatibility, while improvements in high-barrier bio-coatings are expanding shelf-stable and refrigerated applications previously reserved for aluminum-laminated or metallized films. Regional composting infrastructure additions, most notably in Europe and key urban areas of North America and the Asia-Pacific region, are alleviating a historic disposal bottleneck. Feedstock volatility remains a headline risk, yet vertically integrated players that control both agricultural inputs and polymerization assets are beginning to neutralize cost swings.

Key Report Takeaways

- * By material type, bioplastics led with 48.21% revenue share in 2025, while plant-based composites are forecast to expand at 7.42% CAGR through 2031.
- * By packaging format, flexible solutions commanded 56.32% of the revenue in 2025, whereas rigid formats are projected to post the fastest CAGR of 7.89% from 2026 to 2031.
- * By end-user industry, food applications accounted for a 38.42% share in 2025, while the personal care and cosmetics sector is expected to grow at an 8.23% CAGR over the forecast period.
- * By distribution channel, direct sales secured a 58.31% share in 2025, while indirect channels are expected to register a 7.56% CAGR through 2031.
- * By geography, Europe held a 40.21% revenue share in 2025, whereas the Asia-Pacific region is anticipated to record the highest 8.85% CAGR from 2026 to 2031.

Key Market Trends

Global Biodegradable Packaging Solutions Market Trends and InsightsDrivers Impact Analysis*

Driver | (~) % Impact on CAGR Forecast | Geographic Relevance | Impact Timeline

- Growing Consumer Demand for Circular, Zero-Waste Packaging | +1.2% | Global, highest in North America and Europe | Medium term (2-4 years) |
- Expansion of Composting Infrastructure in Urban Centers | +0.9% | Europe core, North America and Asia-Pacific clusters | Long term (≥ 4 years) |
- Mandatory Extended Producer Responsibility Schemes Globally | +1.5% | Europe, Canada, select U.S. states, emerging Asia-Pacific | Short term (≤ 2 years) |
- Advances in High-Barrier Bio-Based Coatings Unlocking New Applications | +0.8% | Global, R&D in North America and Europe | Medium term (2-4 years) |
- Rapid Capacity Additions for PLA and PHA in Asia-Pacific | +1.1% | Asia-Pacific core, spill-over to Middle East and Africa | Short term (≤ 2 years) |
- Retailers' Private-Label Sustainability Targets Accelerating Adoption | +0.7% | Global, led by North America and Europe retail chains | Short term (≤ 2 years) |

Source: Mordor Intelligence |

Competitive Landscape

Competitive Landscape

The biodegradable packaging solutions market remains moderately fragmented, as the top 10 players hold an estimated 35-40% combined share. Large, vertically integrated firms such as Amcor, Mondi, and Smurfit WestRock leverage global reach to co-design high-barrier laminates and secure multi-year supply contracts with multinationals. Polymer innovators, including BASF, NatureWorks, and Novamont, compete through performance enhancements, simultaneously acquiring or partnering with downstream converters to capture market share and margin. Regional specialists exploit niche substrates such as Ecovative's mycelium cushioning and Notpla's seaweed films to serve premium segments demanding brand differentiation.

Patent filings in bio-based barrier technologies increased 34% between 2024 and 2025, led by BASF, NatureWorks, and Stora Enso. White space remains in carbonate beverages and aseptic cartons, where current bio-coatings cannot yet match a 12-18-month shelf life; the first mover to crack this code could unlock a multi-billion-dollar opportunity. Closed-loop take-back programs, though logistics-intensive, offer compelling brand stories and customer lock-in for firms that can finance the infrastructure. Enzymatic depolymerization startups aiming to convert post-consumer PLA back into lactide monomers suggest future circularity pathways that could redefine competitive parameters within the biodegradable packaging solutions market.

Biodegradable Packaging Solutions Industry Leaders* Mondi Group

- * Tetra Pak International SA
- * Sealed Air Corporation
- * International Paper Company
- * Amcor plc

* *Disclaimer: Major Players sorted in no particular order
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Scope Methodology P Space

This market covers packaging solutions that are designed to biodegrade after disposal and return to natural elements within a short time frame, typically within a year or less, and it is measured in revenue terms across global demand.

Scope exclusions: It does not count conventional plastic packaging that is recyclable only, and it excludes non-biodegradable barrier layers that do not meet biodegradation intent.

Segmentation Container

- * By Material Type* Bioplastics* Starch-Based Plastics
- * Cellulose-Based Plastics
- * Polylactic Acid (PLA)
- * Polyhydroxyalkanoates (PHA)
- * Polybutylene Succinate (PBS)
- * Other Compostable Polymers
- * Paper
- * Molded Pulp Fiber

- * Plant-Based Composites (Mushroom, Seaweed, Bagasse)
- * By Packaging Format* Rigid Packaging* Bottles and Jars
 - * Trays and Clamshells
 - * Boxes and Cartons
 - * Other Rigid Packagings
- * Flexible Packaging* Films and Wraps
 - * Pouches and Bags
 - * Other Flexible Packagings
- * By End-User Industry* Food
 - * Beverage
 - * Healthcare and Pharmaceuticals
 - * Personal Care and Cosmetics
 - * E-Commerce and Retail
 - * Other End-user Industries
- * By Distribution Channel* Direct Sales
 - * Indirect Sales
- * By Geography* North America* United States
 - * Canada
 - * Mexico
- * South America* Brazil
 - * Argentina
 - * Rest of South America
- * Europe* Germany
 - * United Kingdom
 - * France
 - * Italy
 - * Spain
 - * Rest of Europe
- * Asia-Pacific* China
 - * Japan
 - * India
 - * South Korea
 - * Australia
 - * Rest of Asia-Pacific
- * Middle East and Africa* Middle East* Saudi Arabia
 - * United Arab Emirates
 - * Turkey
 - * Rest of Middle East
- * Africa* South Africa
 - * Egypt
 - * Nigeria
 - * Rest of Africa

Frequently Asked Questions

What is the projected value of the biodegradable packaging solutions market in 2031?

The market is expected to reach USD 159.97 billion by 2031.

Which material category is growing fastest within biodegradable packaging?

Plant-based composites such as mushroom mycelium, seaweed films, and bagasse products are forecast to grow at 7.42% CAGR through 2031.

Why is Asia-Pacific considered the high-growth region?

Robust policy mandates in China and India, coupled with rapid PLA and PHA capacity expansions, drive an anticipated 8.85% CAGR to 2031.

How do Extended Producer Responsibility schemes affect adoption?

EPR laws impose higher fees on non-compostable plastics, incentivizing brand owners to switch to certified biodegradable materials to lower compliance costs.

Which packaging format currently leads market share?

Flexible packaging, including films, wraps, and pouches, held 56.32% revenue share in 2025.

What major technical hurdle remains for biodegradable packaging?

Achieving moisture and oxygen barriers comparable to conventional plastics in carbonated beverage and aseptic applications continues to be a key challenge.