

# **Biodegradable and Compostable Packaging Market Forecasts to 2032 – Global Analysis By Product Type (Bottles & Jars, Trays & Clamshells, Films & Wraps, Pouches & Bags, Cups & Bowls, and Other Product Types), Material Type, Technology, Application, End User, and By Geography**

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## **Abstracts**

According to Statistics MRC, the Global Biodegradable and Compostable Packaging Market is accounted for \$83.7 billion in 2025 and is expected to reach \$137.1 billion by 2032 growing at a CAGR of 7.3% during the forecast period. Biodegradable and compostable packaging offers packaging made from biodegradable polymers, bioplastics, and compostable materials designed to reduce landfill waste and environmental impact. Growth accelerates with regulatory bans on certain single-use plastics, corporate sustainability targets, and consumer preference for greener packaging. Advances in feedstocks, manufacturing scale-up, and certification standards improve performance and supply reliability. Brands in foodservice and retail adopt compostable alternatives where collection infrastructure exists.

### **Market Dynamics:**

Driver:

Rising environmental concerns and plastic pollution

The primary driver for this market is the escalating global crisis of plastic pollution, which has spurred stringent governmental regulations and a profound shift in consumer consciousness. Bans on single-use plastics across numerous countries are compelling

manufacturers to seek compliant alternatives. Furthermore, heightened consumer awareness is driving brand owners to adopt sustainable packaging as a core component of their corporate social responsibility and brand identity. This collective pressure from both regulatory bodies and the end-user is creating a powerful, sustained demand for biodegradable and compostable packaging solutions across all consumer-facing industries

#### Restraint:

##### Limited industrial composting infrastructure

A significant barrier to the market's seamless growth is the underdeveloped state of industrial composting facilities, which are essential for properly processing these materials. Many compostable packages require specific, high-temperature conditions to break down, which home composting cannot achieve. This infrastructure gap creates consumer confusion over proper disposal methods and leads to potential contamination of recycling or composting streams. Consequently, even products with the correct certifications may end up in landfills, undermining their environmental promise and eroding consumer trust, thereby slowing mainstream adoption.

#### Opportunity:

##### Growing e-commerce sector driving demand for sustainable packaging

The explosive growth of the e-commerce sector presents a substantial opportunity, as it directly correlates with a massive increase in packaging waste from shipping boxes, mailers, and protective fillers. E-commerce giants and smaller retailers alike are facing pressure to minimize their environmental footprint. This is driving robust demand for sustainable, lightweight, and protective packaging solutions for shipment. The sector's continuous innovation and scale provide an ideal platform for the widespread testing and adoption of compostable mailers and biodegradable cushioning materials, creating a major new revenue stream.

#### Threat:

##### Competition from traditional plastic packaging

The market faces persistent competition from conventional plastics, which remain significantly cheaper to produce due to established, economies-of-scale manufacturing

and a mature supply chain. For many cost-sensitive businesses and consumers, this price differential is a decisive factor. Moreover, traditional plastics often offer superior durability and barrier properties for certain applications. This economic and performance advantage ensures that virgin and recycled plastics continue to be the default choice in many segments, posing a constant threat to the market penetration of biodegradable alternatives.

### **Covid-19 Impact:**

The pandemic initially disrupted the market, causing supply chain bottlenecks and shifting consumer priority towards hygiene, which temporarily boosted conventional plastic use for medical and food packaging. However, this was counterbalanced by a surge in e-commerce and home-delivered groceries, which sustained demand for packaging materials. Crucially, the crisis amplified long-term environmental awareness, as the visible increase in plastic waste reinforced the need for sustainable systems. Consequently, the initial setback has arguably accelerated corporate and governmental commitments to circular economy principles, strengthening the market's foundation post-crisis.

The pouches & bags segment is expected to be the largest during the forecast period

The pouches & bags segment is expected to account for the largest market share during the forecast period driven by its ubiquitous application across food and beverage, personal care, and retail industries. This format is highly versatile, offering lightweight, flexible, and efficient packaging for a vast range of products from snacks to liquid detergents. The ongoing shift away from single-use plastic bags and pouches, fueled by global legislative bans, is directly channeling demand towards their biodegradable counterparts. Moreover, advancements in material science are enabling these sustainable pouches to meet critical requirements for durability and shelf-life, making them a viable and preferred drop-in solution for brands and consumers.

The bioplastics segment is expected to have the highest CAGR during the forecast period

Over the forecast period, the bioplastics segment is predicted to witness the highest growth rate fueled by continuous innovation and expanding production capacities that are improving cost-effectiveness. Materials like Polylactic Acid (PLA) and Polyhydroxyalkanoates (PHA) are at the forefront, offering enhanced performance characteristics that are increasingly competitive with traditional plastics. Furthermore,

investment in bio-based feedstocks, such as seaweed and agricultural waste, is broadening the raw material base beyond food crops, thereby addressing sustainability concerns. This relentless R&D focus, coupled with growing brand partnerships for developing advanced applications, positions bioplastics as the key growth engine.

### **Region with largest share:**

During the forecast period, the North America region is expected to hold the largest market share. This dominance is anchored by a well-established regulatory framework that actively discourages single-use plastics through bans and extended producer responsibility laws. Additionally, the region benefits from a high level of consumer environmental awareness and a strong presence of major retail and FMCG brands that are aggressively incorporating sustainability into their packaging portfolios. The comparatively more developed industrial composting infrastructure in certain areas, particularly in the United States and Canada, further supports the commercial viability and end-of-life management of these products, solidifying the region's leading position.

### **Region with highest CAGR:**

Over the forecast period, the Asia Pacific region is anticipated to exhibit the highest CAGR. This explosive growth is primarily triggered by rapidly evolving government policies in populous nations like India and China, which are implementing stringent bans on single-use plastics to combat severe pollution. The massive and expanding e-commerce sector, coupled with a growing middle class with increasing disposable income and environmental consciousness, creates a colossal demand driver. Furthermore, the region is becoming a hub for bioplastic production, attracting significant investments that will improve local supply chain availability and reduce costs, fueling accelerated market adoption.

### **Key players in the market**

Some of the key players in Biodegradable and Compostable Packaging Market include Amcor plc, Mondi Group, Tetra Pak International SA, Elevate Packaging, Imex Packaging, DS Smith, DuPont, Ball Corporation, TIPA Ltd, RockTenn (now part of WestRock), Ultra-Green Sustainable Packaging, ?zsoy Plastik, International Paper Company, SmartSolve Industries, Klabin SA, WestRock Company, Hosg?r Plastik, Smurfit Kappa, Rengo Co. Ltd, and Stora Enso.

### **Key Developments:**

In June 2025, Mondi developed an innovative paper bag with Sustainex® bio-based coating for Meade Farm Group, replacing hard-to-recycle plastic with paper certified as compostable. The FSC™-certified bag uses high-strength kraft paper, corn starch-based netting, water-based ink, and Mondi's biodegradable coating, launched across several European countries. This won the silver Fruit Logistica Innovation Award.

In May 2025, Amcor and Mets? Group announced a collaboration to develop fiber-based food packaging solutions. This partnership combines Amcor's high-barrier film technology with Mets? Group's wood-based molded fiber product, Muoto™, aiming to enhance the shelf life of perishable food products while promoting sustainability.

In July 2022, Mondi, a global leader in packaging and paper, in partnership with Fiorini International, a world leading converter and packaging producer based in Italy, has successfully created and launched a new fully recyclable paper packaging for a premium Italian pasta brand.

#### Product Types Covered:

Bottles & Jars

Trays & Clamshells

Films & Wraps

Pouches & Bags

Cups & Bowls

Other Product Types

#### Material Types Covered:

Paper & Paperboard

Bioplastics

Plant-based Composites

## Other Material Types

### Technologies Covered:

Advances in Biodegradable Materials

Emerging Technologies

### Applications Covered:

Food Packaging

Non-food Packaging

Industrial Packaging

### End Users Covered:

Food & Beverages

Personal Care & Cosmetics

Pharmaceuticals

Consumer Electronics

Other End Users

### Regions Covered:

North America

US

Canada

Mexico

Europe

Germany

UK

Italy

France

Spain

Rest of Europe

Asia Pacific

Japan

China

India

Australia

New Zealand

South Korea

Rest of Asia Pacific

South America

Argentina

Brazil

Chile

Rest of South America

Middle East & Africa

Saudi Arabia

UAE

Qatar

South Africa

Rest of Middle East & Africa

**What our report offers:**

- Market share assessments for the regional and country-level segments
- Strategic recommendations for the new entrants
- Covers Market data for the years 2024, 2025, 2026, 2028, and 2032
- Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)
- Strategic recommendations in key business segments based on the market estimations
- Competitive landscaping mapping the key common trends
- Company profiling with detailed strategies, financials, and recent developments
- Supply chain trends mapping the latest technological advancements

**Free Customization Offerings:**

All the customers of this report will be entitled to receive one of the following free customization options:

Company Profiling

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

Regional Segmentation

Market estimations, Forecasts and CAGR of any prominent country as per the client's interest (Note: Depends on feasibility check)

Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

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