

Sustainable Packaging Coatings & Barrier Materials Market Forecasts to 2034 – Global Analysis By Material Type (Water-Based Coatings, Bio-Based Coatings, Compostable & Biodegradable Coatings, Nanocoatings and Other Material Types), Substrate, Technology, Application, End User and By Geography

<https://marketpublishers.com/r/SCC899C109C6EN.html>

Date: April 2026

Pages: 200

Price: US\$ 4,150.00 (Single User License)

ID: SCC899C109C6EN

Abstracts

According to Statistics MRC, the Global Sustainable Packaging Coatings & Barrier Materials Market is accounted for \$8 billion in 2026 and is expected to reach \$22 billion by 2034 growing at a CAGR of 13% during the forecast period. Sustainable Packaging Coatings & Barrier Materials are eco-friendly solutions applied to packaging to enhance properties such as moisture resistance, oxygen barrier, and durability while maintaining recyclability or biodegradability. These coatings are derived from natural or bio-based materials and are designed to replace traditional plastic or chemical-based barriers. They are widely used in food packaging, pharmaceuticals, and consumer goods. The market is driven by demand for sustainable packaging solutions, regulatory restrictions on plastics, and advancements in material science improving performance and environmental compatibility.

Market Dynamics:

Driver:

Rising demand for eco-friendly packaging

Consumers and regulators are increasingly pressuring brands to reduce reliance on conventional plastics and adopt greener alternatives. Sustainable coatings and barrier

materials enhance recyclability and biodegradability while maintaining product safety. Food and beverage companies are leading adoption, driven by sustainability commitments and regulatory mandates. The shift toward circular economy practices is further accelerating demand. As eco-friendly packaging becomes a competitive differentiator, coatings and barrier materials are gaining prominence.

Restraint:

Performance limitations in barrier properties

Performance limitations in barrier properties remain a significant restraint for the market. While sustainable coatings aim to replace traditional plastics, many struggle to match the moisture, oxygen, and grease resistance of conventional materials. This can limit their application in sensitive sectors such as pharmaceuticals and high-moisture foods. Manufacturers face challenges in balancing sustainability with performance requirements. Ongoing R&D is addressing these limitations, but adoption remains cautious in industries with strict safety standards. Without consistent performance, sustainable coatings risk slower uptake.

Opportunity:

Development of bio-based coating materials

Innovations in plant-derived polymers, starch blends, and cellulose-based coatings are enabling sustainable alternatives with improved barrier properties. Bio-based materials align with consumer demand for natural and renewable solutions. Companies are investing in R&D partnerships to accelerate commercialization of bio-based coatings. Integration with recyclable substrates further enhances sustainability. These innovations also support compliance with tightening global regulations on single-use plastics.

Threat:

Supply chain constraints for raw materials

Bio-based and specialty materials often face limited availability and higher costs compared to conventional plastics. Disruptions in agricultural supply chains or geopolitical factors can affect raw material sourcing. Manufacturers may struggle to secure consistent supplies, impacting production scalability. Price volatility further challenges profitability and adoption in cost-sensitive markets. Companies are exploring

diversified sourcing and local production to mitigate risks.

Covid-19 Impact:

The COVID-19 pandemic had a mixed impact on the sustainable packaging coatings market. On one hand, disruptions in supply chains and reduced industrial activity slowed adoption. On the other hand, the surge in packaged food and e-commerce highlighted the importance of sustainable packaging solutions. Brands leveraged eco-friendly coatings to differentiate themselves and appeal to conscious consumers. The pandemic also accelerated regulatory focus on waste reduction and sustainability. Post-pandemic recovery has reignited investments in sustainable packaging innovations.

The water-based coatings segment is expected to be the largest during the forecast period

The water-based coatings segment is expected to account for the largest market share during the forecast period as rising demand for eco-friendly packaging has intensified adoption of low-VOC and recyclable coating solutions. Water-based coatings provide effective barrier properties while reducing environmental impact compared to solvent-based alternatives. Food and beverage companies are increasingly adopting these coatings to meet sustainability goals. Advances in formulation are improving performance, expanding applications across diverse packaging categories. Regulatory support for low-emission materials further strengthens this segment. With growing consumer preference for sustainable packaging, water-based coatings are expected to dominate the market.

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

Over the forecast period, the pharmaceutical packaging segment is predicted to witness the highest growth rate due to rising demand for eco-friendly packaging, which has driven innovation in sustainable barrier materials for sensitive healthcare products. Pharmaceuticals require coatings with strong barrier properties to ensure product safety and efficacy. Sustainable coatings are being developed to meet these stringent requirements while reducing environmental impact. Regulatory pressure on healthcare companies to adopt greener practices is accelerating adoption. Growing demand for safe, sustainable packaging in healthcare is expected to fuel rapid growth.

Region with largest share:

During the forecast period, the North America region is expected to hold the largest market share owing to advanced packaging infrastructure and rising demand for eco-friendly packaging across industries. The U.S. leads in adoption, supported by strong regulatory frameworks and consumer awareness. Major packaging companies are headquartered in the region, driving innovation and commercialization. High demand from food, beverage, and pharmaceutical sectors strengthens market leadership. The region also benefits from strong investments in R&D and sustainable material development. Ongoing initiatives to reduce single-use plastics further support adoption.

Region with highest CAGR:

Over the forecast period, the Asia Pacific region is anticipated to exhibit the highest CAGR driven by rapid industrialization and rising demand for eco-friendly packaging in emerging economies. Countries such as China, India, and Southeast Asia are witnessing increasing adoption of sustainable packaging solutions. Governments are promoting waste reduction and circular economy initiatives. Local manufacturers are developing cost-effective coatings tailored to regional needs. Rising disposable incomes and growing consumer awareness are boosting demand for sustainable products. Collaborations with global players are accelerating innovation and commercialization.

Key players in the market

Some of the key players in Sustainable Packaging Coatings & Barrier Materials Market include BASF SE, Dow Inc., Arkema S.A., Evonik Industries AG, Akzo Nobel N.V., PPG Industries Inc., Stora Enso Oyj, UPM-Kymmene Corporation, Mondi Group, Amcor plc, Tetra Pak International S.A., Sonoco Products Company, Smurfit Kappa Group, Henkel AG & Co. KGaA, Kuraray Co. Ltd. and Borregaard ASA.

Key Developments:

In February 2026, BASF SE partnered with Mondi Group to co-develop bio-based barrier coatings for paper packaging. The collaboration integrates BASF's polymer expertise with Mondi's sustainable packaging portfolio, reinforcing Europe's leadership in eco-friendly solutions.

In December 2025, UPM-Kymmene Corporation launched fiber-based packaging with integrated bio-barrier layers. The innovation enhances recyclability and aligns with EU sustainability directives.

In November 2025, Evonik Industries AG acquired a specialty coatings startup focused on compostable barrier materials. The acquisition enhances Evonik's sustainable packaging portfolio and accelerates entry into high-growth eco-friendly markets.

In February 2024,

Material Types Covered:

Water-Based Coatings

Bio-Based Coatings

Compostable & Biodegradable Coatings

Nanocoatings

Other Material Types

Substrates Covered:

Paper & Paperboard

Plastics

Metal Packaging

Glass Packaging

Flexible Packaging

Other Substrates

Technologies Covered:

Extrusion Coating

Dispersion Coating

Vacuum Deposition

Sol-Gel Technology

Other Technologies

Applications Covered:

Moisture Barrier

Oxygen Barrier

Grease & Oil Resistance

Heat Seal Coatings

Chemical Resistance

Other Applications

End Users Covered:

Food & Beverage Packaging

Pharmaceutical Packaging

Personal Care & Cosmetics

Industrial Packaging

Other End Users

Regions Covered:

North America

United States

Canada

Mexico

Europe

United Kingdom

Germany

France

Italy

Spain

Netherlands

Belgium

Sweden

Switzerland

Poland

Rest of Europe

Asia Pacific

China

Japan

India

South Korea

Australia

Indonesia

Thailand

Malaysia

Singapore

Vietnam

Rest of Asia Pacific

South America

Brazil

Argentina

Colombia

Chile

Peru

Rest of South America

Rest of the World (RoW)

Middle East

Saudi Arabia

United Arab Emirates

Qatar

Israel

Rest of Middle East

Africa

South Africa

Egypt

Morocco

Rest of 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 2023, 2024, 2025, 2026, 2027, 2028, 2030, 2032 and 2034

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

Contents

1 EXECUTIVE SUMMARY

- 1.1 Market Snapshot and Key Highlights
- 1.2 Growth Drivers, Challenges, and Opportunities
- 1.3 Competitive Landscape Overview
- 1.4 Strategic Insights and Recommendations

2 RESEARCH FRAMEWORK

- 2.1 Study Objectives and Scope
- 2.2 Stakeholder Analysis
- 2.3 Research Assumptions and Limitations
- 2.4 Research Methodology
 - 2.4.1 Data Collection (Primary and Secondary)
 - 2.4.2 Data Modeling and Estimation Techniques
 - 2.4.3 Data Validation and Triangulation
 - 2.4.4 Analytical and Forecasting Approach

3 MARKET DYNAMICS AND TREND ANALYSIS

- 3.1 Market Definition and Structure
- 3.2 Key Market Drivers
- 3.3 Market Restraints and Challenges
- 3.4 Growth Opportunities and Investment Hotspots
- 3.5 Industry Threats and Risk Assessment
- 3.6 Technology and Innovation Landscape
- 3.7 Emerging and High-Growth Markets
- 3.8 Regulatory and Policy Environment
- 3.9 Impact of COVID-19 and Recovery Outlook

4 COMPETITIVE AND STRATEGIC ASSESSMENT

- 4.1 Porter's Five Forces Analysis
 - 4.1.1 Supplier Bargaining Power
 - 4.1.2 Buyer Bargaining Power
 - 4.1.3 Threat of Substitutes
 - 4.1.4 Threat of New Entrants

- 4.1.5 Competitive Rivalry
- 4.2 Market Share Analysis of Key Players
- 4.3 Product Benchmarking and Performance Comparison

5 GLOBAL SUSTAINABLE PACKAGING COATINGS & BARRIER MATERIALS MARKET, BY MATERIAL TYPE

- 5.1 Water-Based Coatings
- 5.2 Bio-Based Coatings
- 5.3 Compostable & Biodegradable Coatings
- 5.4 Nanocoatings
- 5.5 Other Material Types

6 GLOBAL SUSTAINABLE PACKAGING COATINGS & BARRIER MATERIALS MARKET, BY SUBSTRATE

- 6.1 Paper & Paperboard
- 6.2 Plastics
- 6.3 Metal Packaging
- 6.4 Glass Packaging
- 6.5 Flexible Packaging
- 6.6 Other Substrates

7 GLOBAL SUSTAINABLE PACKAGING COATINGS & BARRIER MATERIALS MARKET, BY TECHNOLOGY

- 7.1 Extrusion Coating
- 7.2 Dispersion Coating
- 7.3 Vacuum Deposition
- 7.4 Sol-Gel Technology
- 7.5 Other Technologies

8 GLOBAL SUSTAINABLE PACKAGING COATINGS & BARRIER MATERIALS MARKET, BY APPLICATION

- 8.1 Moisture Barrier
- 8.2 Oxygen Barrier
- 8.3 Grease & Oil Resistance
- 8.4 Heat Seal Coatings

8.5 Chemical Resistance

8.6 Other Applications

9 GLOBAL SUSTAINABLE PACKAGING COATINGS & BARRIER MATERIALS MARKET, BY END USER

9.1 Food & Beverage Packaging

9.2 Pharmaceutical Packaging

9.3 Personal Care & Cosmetics

9.4 Industrial Packaging

9.5 Other End Users

10 GLOBAL SUSTAINABLE PACKAGING COATINGS & BARRIER MATERIALS MARKET, BY GEOGRAPHY

10.1 North America

10.1.1 United States

10.1.2 Canada

10.1.3 Mexico

10.2 Europe

10.2.1 United Kingdom

10.2.2 Germany

10.2.3 France

10.2.4 Italy

10.2.5 Spain

10.2.6 Netherlands

10.2.7 Belgium

10.2.8 Sweden

10.2.9 Switzerland

10.2.10 Poland

10.2.11 Rest of Europe

10.3 Asia Pacific

10.3.1 China

10.3.2 Japan

10.3.3 India

10.3.4 South Korea

10.3.5 Australia

10.3.6 Indonesia

10.3.7 Thailand

- 10.3.8 Malaysia
- 10.3.9 Singapore
- 10.3.10 Vietnam
- 10.3.11 Rest of Asia Pacific
- 10.4 South America
 - 10.4.1 Brazil
 - 10.4.2 Argentina
 - 10.4.3 Colombia
 - 10.4.4 Chile
 - 10.4.5 Peru
 - 10.4.6 Rest of South America
- 10.5 Rest of the World (RoW)
 - 10.5.1 Middle East
 - 10.5.1.1 Saudi Arabia
 - 10.5.1.2 United Arab Emirates
 - 10.5.1.3 Qatar
 - 10.5.1.4 Israel
 - 10.5.1.5 Rest of Middle East
 - 10.5.2 Africa
 - 10.5.2.1 South Africa
 - 10.5.2.2 Egypt
 - 10.5.2.3 Morocco
 - 10.5.2.4 Rest of Africa

11 STRATEGIC MARKET INTELLIGENCE

- 11.1 Industry Value Network and Supply Chain Assessment
- 11.2 White-Space and Opportunity Mapping
- 11.3 Product Evolution and Market Life Cycle Analysis
- 11.4 Channel, Distributor, and Go-to-Market Assessment

12 INDUSTRY DEVELOPMENTS AND STRATEGIC INITIATIVES

- 12.1 Mergers and Acquisitions
- 12.2 Partnerships, Alliances, and Joint Ventures
- 12.3 New Product Launches and Certifications
- 12.4 Capacity Expansion and Investments
- 12.5 Other Strategic Initiatives

13 COMPANY PROFILES

- 13.1 BASF SE
- 13.2 Dow Inc.
- 13.3 Arkema S.A.
- 13.4 Evonik Industries AG
- 13.5 Akzo Nobel N.V.
- 13.6 PPG Industries Inc.
- 13.7 Stora Enso Oyj
- 13.8 UPM-Kymmene Corporation
- 13.9 Mondi Group
- 13.10 Amcor plc
- 13.11 Tetra Pak International S.A.
- 13.12 Sonoco Products Company
- 13.13 Smurfit Kappa Group
- 13.14 Henkel AG & Co. KGaA
- 13.15 Kuraray Co. Ltd.
- 13.16 Borregaard ASA

List Of Tables

LIST OF TABLES

Table 1 Global Sustainable Packaging Coatings & Barrier Materials Market Outlook, By Region (2023-2034) (\$MN)

Table 2 Global Sustainable Packaging Coatings & Barrier Materials Market, By Material Type (2023–2034) (\$MN)

Table 3 Global Sustainable Packaging Coatings & Barrier Materials Market, By Water-Based Coatings (2023–2034) (\$MN)

Table 4 Global Sustainable Packaging Coatings & Barrier Materials Market, By Bio-Based Coatings (2023–2034) (\$MN)

Table 5 Global Sustainable Packaging Coatings & Barrier Materials Market, By Compostable & Biodegradable Coatings (2023–2034) (\$MN)

Table 6 Global Sustainable Packaging Coatings & Barrier Materials Market, By Nanocoatings (2023–2034) (\$MN)

Table 7 Global Sustainable Packaging Coatings & Barrier Materials Market, By Other Material Types (2023–2034) (\$MN)

Table 8 Global Sustainable Packaging Coatings & Barrier Materials Market, By Substrate (2023–2034) (\$MN)

Table 9 Global Sustainable Packaging Coatings & Barrier Materials Market, By Paper & Paperboard (2023–2034) (\$MN)

Table 10 Global Sustainable Packaging Coatings & Barrier Materials Market, By Plastics (2023–2034) (\$MN)

Table 11 Global Sustainable Packaging Coatings & Barrier Materials Market, By Metal Packaging (2023–2034) (\$MN)

Table 12 Global Sustainable Packaging Coatings & Barrier Materials Market, By Glass Packaging (2023–2034) (\$MN)

Table 13 Global Sustainable Packaging Coatings & Barrier Materials Market, By Flexible Packaging (2023–2034) (\$MN)

Table 14 Global Sustainable Packaging Coatings & Barrier Materials Market, By Other Substrates (2023–2034) (\$MN)

Table 15 Global Sustainable Packaging Coatings & Barrier Materials Market, By Technology (2023–2034) (\$MN)

Table 16 Global Sustainable Packaging Coatings & Barrier Materials Market, By Extrusion Coating (2023–2034) (\$MN)

Table 17 Global Sustainable Packaging Coatings & Barrier Materials Market, By Dispersion Coating (2023–2034) (\$MN)

Table 18 Global Sustainable Packaging Coatings & Barrier Materials Market, By

Vacuum Deposition (2023–2034) (\$MN)

Table 19 Global Sustainable Packaging Coatings & Barrier Materials Market, By Sol-Gel Technology (2023–2034) (\$MN)

Table 20 Global Sustainable Packaging Coatings & Barrier Materials Market, By Other Technologies (2023–2034) (\$MN)

Table 21 Global Sustainable Packaging Coatings & Barrier Materials Market, By Application (2023–2034) (\$MN)

Table 22 Global Sustainable Packaging Coatings & Barrier Materials Market, By Moisture Barrier (2023–2034) (\$MN)

Table 23 Global Sustainable Packaging Coatings & Barrier Materials Market, By Oxygen Barrier (2023–2034) (\$MN)

Table 24 Global Sustainable Packaging Coatings & Barrier Materials Market, By Grease & Oil Resistance (2023–2034) (\$MN)

Table 25 Global Sustainable Packaging Coatings & Barrier Materials Market, By Heat Seal Coatings (2023–2034) (\$MN)

Table 26 Global Sustainable Packaging Coatings & Barrier Materials Market, By Chemical Resistance (2023–2034) (\$MN)

Table 27 Global Sustainable Packaging Coatings & Barrier Materials Market, By Other Applications (2023–2034) (\$MN)

Table 28 Global Sustainable Packaging Coatings & Barrier Materials Market, By End User (2023–2034) (\$MN)

Table 29 Global Sustainable Packaging Coatings & Barrier Materials Market, By Food & Beverage Packaging (2023–2034) (\$MN)

Table 30 Global Sustainable Packaging Coatings & Barrier Materials Market, By Pharmaceutical Packaging (2023–2034) (\$MN)

Table 31 Global Sustainable Packaging Coatings & Barrier Materials Market, By Personal Care & Cosmetics (2023–2034) (\$MN)

Table 32 Global Sustainable Packaging Coatings & Barrier Materials Market, By Industrial Packaging (2023–2034) (\$MN)

Table 33 Global Sustainable Packaging Coatings & Barrier Materials Market, By Other End Users (2023–2034) (\$MN)

Note: Tables for North America, Europe, APAC, South America, and Rest of the World (RoW) are also represented in the same manner as above.

I would like to order

Product name: Sustainable Packaging Coatings & Barrier Materials Market Forecasts to 2034 – Global Analysis By Material Type (Water-Based Coatings, Bio-Based Coatings, Compostable & Biodegradable Coatings, Nanocoatings and Other Material Types), Substrate, Technology, Application, End User and By Geography

Product link: <https://marketpublishers.com/r/SCC899C109C6EN.html>

Price: US\$ 4,150.00 (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/SCC899C109C6EN.html>