

The Global Market for Biodegradable and Compostable Packaging 2025-2035

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Abstracts

The market for biodegradable and compostable packaging is experiencing rapid growth, driven by increasing environmental awareness, stringent regulations, and shifting consumer preferences towards sustainable products. This sector has emerged as a crucial component of the global packaging industry, offering eco-friendly alternatives to traditional plastic packaging. Currently, the market is characterized by a diverse range of materials and technologies, including polylactic acid (PLA), polyhydroxyalkanoates (PHA), starch-based blends, and cellulose-derived packaging solutions. These materials are finding applications across various industries, with food packaging representing the largest segment due to growing concerns about plastic waste in the food supply chain. Major players in the packaging industry are investing heavily in research and development to improve the performance and cost-effectiveness of biodegradable materials. Simultaneously, numerous start-ups and innovative companies are entering the market with novel solutions, such as seaweed-based packaging and mycelium-derived materials. The market is witnessing a trend towards the development of compostable packaging that can break down in home composting conditions, addressing the limitations of industrial composting infrastructure. Additionally, there is a growing focus on creating multi-functional packaging that not only biodegrades but also offers enhanced shelf life for products or incorporates smart technologies.

Despite its growth, the biodegradable packaging market faces challenges, including higher production costs compared to conventional plastics, performance limitations in certain applications, and the need for proper waste management infrastructure. However, ongoing technological advancements and economies of scale are gradually addressing these issues. As the global push for sustainability intensifies, the biodegradable and compostable packaging market is expected to continue its upward trajectory. The industry is likely to see further innovations, increased adoption across

various sectors, and potential consolidation as larger companies acquire promising technologies. This growth is not only reshaping the packaging industry but also contributing significantly to global efforts in reducing plastic waste and environmental pollution.

The Global Market for Biodegradable and Compostable Packaging 2025-2035 provides a thorough examination of the market landscape from 2025 to 2035, offering valuable insights for manufacturers, investors, and stakeholders in the sustainable packaging ecosystem. Report contents include:

Market Size and Growth Projections: Detailed forecasts of the biodegradable and compostable packaging market size and growth rate from 2025 to 2035, segmented by product type, material, end-use industry, and region.

Material Innovation Deep Dive: Comprehensive analysis of both synthetic and natural biobased packaging materials, including PLA, Bio-PET, PHA, starch-based blends, and emerging solutions like mycelium and seaweed-based packaging.

Application Landscape: Exploration of key application areas such as food packaging, consumer goods, pharmaceuticals, and e-commerce, with insights into specific requirements and growth opportunities.

Competitive Landscape: Profiles of leading companies and emerging players in the biodegradable packaging space, including their technologies, strategies, and market positioning. Companies profiled include 9Fiber, Inc., ADBioplastics, Advanced Biochemical (Thailand) Co., Ltd., Aeropowder Limited, AGRANA Staerke GmbH, Ahlstrom-Munksjö Oyj, Alberta Innovates/Innotech Materials, LLC, Alter Eco Pulp, Alterpacks, AmicaTerra, An Ph?t Bioplastics, Anellotech, Inc., Ankor Bioplastics Co., Ltd., ANPOLY, Inc., Apeel Sciences, Applied Bioplastics, Aquapak Polymers Ltd, Archer Daniel Midland Company (ADM), Arekapak GmbH, Arkema S.A, Arrow Greentech, Asahi Kasei Chemicals Corporation, Attis Innovations, llc, Avani Eco, Avantium B.V., Avient Corporation, Balrampur Chini Mills, BASF SE, Bio Fab NZ, Bio Plast Pom, Bio2Coat, Bioelements Group, Biofibre GmbH, Bioform Technologies, Biokemik, BIOLO, BioLogiQ, Inc., Biome Bioplastics, Biomass Resin Holdings Co., Ltd., BIO-FED, BIO-LUTIONS International AG, Bioplastech Ltd, BioSmart Nano, BIOTEC GmbH & Co. KG, Biovox GmbH, BlockTexx Pty Ltd., Blue Ocean Closures, Bluepha Beijing Lanjing Microbiology Technology Co., Ltd., BOBST, Borealis AG, Brightplus Oy, Business Innovation Partners Co., Ltd., Carbiolice,

Carbios, Cardia Bioplastics Ltd., CARAPAC Company, Cass Materials Pty Ltd, Celanese Corporation, Cellugy, Cellutech AB (Stora Enso), Chemkey Advanced Materials Technology (Shanghai) Co., Ltd., Chemol Company (Seydel), CJ Biomaterials, Inc., Coastgrass ApS, Corumat, Inc., Cruz Foam, CuanTec Ltd., Daicel Polymer Ltd., Daio Paper Corporation, Danimer Scientific LLC, DIC Corporation, DIC Products, Inc., DKS Co. Ltd., Dow, Inc., DuFor Resins B.V., DuPont, Earthodic Pty Ltd., Ecomann Biotechnology Co., Ltd., Ecoshell, EcoSynthetix, Inc., Ecovia Renewables, Enkev, Epoch Biodesign, Eranova, Esbottle Oy, Fiberlean Technologies, Fiberwood Oy, FKUR Kunststoff GmbH, Floreon, Footprint, Fraunhofer Institute for Silicate Research ISC, Full Cycle Bioplastics LLC, Futamura Chemical Co., Ltd., Futuramat Sarl, Futurity Bio-Ventures Ltd., Genecis Bioindustries, Inc., Grabio Greentech Corporation, Granbio Technologies, GreenNano Technologies Inc., GS Alliance Co. Ltd, Guangzhou Bio-plus Materials Technology Co., Ltd., Hokuetsu Toyo Fibre Co., Ltd., Holmen Iggesund, IUUV Srl, Jiangsu Jinhe Hi-Tech Co., Ltd., Jiangsu Torise Biomaterials Co., Ltd, JinHui ZhaoLang High Technology Co., Ltd., Kagzi Bottles Private Limited, Kami Shoji Company, Kaneka Corporation, Kelpi Industries Ltd., Kingfa Sci. & Tech. Co. Ltd., Klabin S.A., Lactips S.A., LAM'ON, LanzaTech, Licella, Lignin Industries, Loick Biowertstoff GmbH, LOTTE Chemical Corporation, MadeRight, MakeGrowLab, Marea, Marine Innovation Co., Ltd, Melodea Ltd., Mi Terro, Inc., Mitr Phol, Mitsubishi Chemical Corporation, Mitsubishi Polyester Film GmbH, Mitsui Chemicals, Inc., Mobius, Mondi, Multibax Public Co., Ltd., Nabaco, Inc., NatPol, Nature Coatings, Inc., NatureWorks LLC, New Zealand Natural Fibers (NZNF), Newlight Technologies, NEXE Innovations Inc., Nippon Paper Industries, Notpla, Novamont S.p.A., Novomer, Oimo, Oji Paper Company, Omya, one • five GmbH, Origin Materials, Pack2Earth, Paptic Ltd., Pivot Materials LLC, Plafco Fibertech Oy, Plantic Technologies Ltd., Plantics B.V., Poliloop, Polyferm Canada, Pond Biomaterials, Provenance Biofabrics, Inc., PT Intera Lestari Polimer, PTT MCC Biochem Co., Ltd., Qnature UG, Rengo Co., Ltd., Rise Innventia AB, Rodenburg Productie B.V., Roquette S.A., RWDC Industries, S.lab, Sappi Limited, Saudi Basic Industries Corp. (SABIC), Searo, Shellworks, Shenzhen Ecomann Biotechnology Co., Ltd., Sirmax Group, SK Chemicals Co., Ltd., Solvay SA, Spectrus Sustainable Solutions Pvt Ltd, Spero Renewables, StePAC, Stora Enso Oyj, Sufresca, Sulapac Oy, Sulzer Chemtech AG, SUPLA Bioplastics, Sway Innovation Co., Sweetwater Energy, Taghleef Industries Llc, Teal Bioworks, Inc., TemperPack® Technologies, Termot?cnica, TerraVerdae BioWorks Inc, Tianjin GreenBio Materials Co., Ltd, Ticinoplast, TIPA, Toppan Printing Co., Ltd., Toraphene, TotalEnergies Corbion, Universal Bio Pack Co., Ltd., UPM

Biochemicals, UPM-Kymmene Oyj, Valentis Nanotech, Vegea srl, Verso Corporation, Weidmann Fiber Technology, Woamy Oy, Woodly Ltd., Worn Again Technologies, Xampla, Yangi, Yokohama Bio Frontier, Inc., Zelfo Technology, ZeroCircle, Zhejiang Jinjiahao Green Nanomaterial Co., Ltd.

Sustainability Impact: Assessment of the environmental benefits and challenges associated with biodegradable and compostable packaging, including life cycle analyses and circular economy initiatives.

Recent developments in biodegradable packaging technology.

Market Drivers and Opportunities.

Challenges and Market Dynamics

Regional Analysis and Market Opportunities

In-depth analysis of biodegradable packaging applications across various industries:

Food and Beverage: Largest market segment with diverse applications from fresh produce to dairy packaging

Consumer Goods: Growing demand in personal care and household products

Pharmaceutical: Increasing use of bioplastics in medical packaging and drug delivery systems

E-commerce: Rising adoption of sustainable packaging solutions for online retail

Materials Benchmarking and Performance Analysis

Manufacturing and Processing Innovations

Improvements in extrusion and thermoforming processes

Novel approaches to enhance material properties

Scalability considerations for mass production

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