Market Study: Biobased Packaging

World Report (1st edition)

Ceresana
Market Research Since 2002

This brochure provides further information on the study "Biobased Packaging - World (1st edition)"

The Market Study in Brief

Are bioplastic bags compostable and can they be disposed of along with organic waste? In some places, there is a passionate debate about how environmentally friendly bioplastics really are. But that doesn't change the fact that more and more films, containers, bottles and cups of all kinds, closures and lids, as well as labels, adhesive tapes and loose-fill packaging chips are being produced from biobased and/or biodegradable plastics. Ceresana expects revenues to increase to around USD 31.4 billion by 2032.

Innovative and dynamic segment of the plastics market

Short-life packaging is by far the most important application for bioplastics, although they are also increasingly found in long-life high-performance products. In the context of bioeconomy and sustainable circular economy, biopolymers are associated with the hope of climate protection, non-toxic and environmentally friendly products, but also independence from fossil raw materials and new opportunities for agriculture and economically weak regions. PLA, mostly derived from plant starch, is currently the most important bioplastic on the packaging market with a share of 28%. Packaging made from biobased plastics that are not biodegradable, for example polyethylene and PET made from sugarcane ethanol, follow in second place. Ceresana expects the highest growth for PHA: Revenues generated with these biopolyesters formed by bacteria, are expected to increase by 19.4% by 2032.

Biobased packaging for food, cosmetics and pharmaceuticals

The current market report analyzes the development in the various sales markets. The most important sales market in 2022 was the "food and beverages" area, which accounted for almost 61% of all packaging. Bioplastics are increasingly needed not only for bread bags and salad freshness films, but also for dairy products, chilled and frozen foods, ready-made meals and convenience foods, spreads, sauces and condiments, bottles and containers in the beverage segment. However, Ceresana expects the highest volume growth in the "cosmetics and pharma" area: 11.4% per year. This includes packaging for shampoos, shower gels, creams, lotions, makeup, liquid soap or other personal care items, but also packaging for pharmaceutical products.

The Study in short:

Chapter 1 analyzes the global market - including forecasts up to 2032: the development of both demand and revenue is given for each world region. In addition, the various packaging types, applications and types are examined individually. Rigid packaging (e.g. bottles, cans and containers) and flexible packaging (bags, sacks, pouches) are covered separately.
The following applications for packaging made of bioplastics are considered: Food and beverages, Consumer goods, Cosmetics and pharma, and Other packaging areas.
The packaging market is broken down for the various types for Europe, North America, Asia-Pacific and "RoW": PLA, Starch-based plastics, PHA, Other biodegradable plastics, and Biobased but non-biodegradable plastics.

Chapter 2 considers the 11 most important sales countries individually. In each case, the following are presented: Revenue, demand for the applications, and demand per type.

Chapter 3 provides 54 company profiles of bioplastic packaging manufacturers, e.g. Alpagro, Amcor, DSM, Innovia Films, Mitsubishi Chemical, Mondi, Sealed Air, and Taghleef.

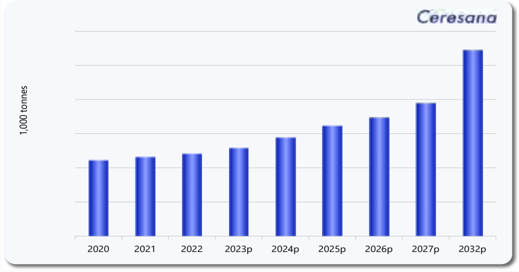
Table of Contents (1/3)

1 Market Data: World and Regions

2.1 Europe

2.1.2 Germany

The demand for bioplastics for packaging in Germany amounted to XXX tonnes in 2022. We expect demand to increase by X % p.a. on average and to reach around X tons by 2032. Revenues generated with bioplastics for packaging amounted to approximately EUR X billion in 2022. We expect an average increase of X % p.a. until 2032.



Graph: Demand in Germany from 2020 to 2032

in 1,000 tonnes	2020	2021	2022	2023p	2024p	2025p	2026p	2027p	2032p	2022-2032
Food & Beverages	X	X	X	X	X	X	X	X	X	X% p.a.
Consumer goods	X	X	X	X	X	X	X	X	X	X% p.a.
Cosmetics & Pharma	X	X	X	X	X	X	X	X	X	X% p.a.
Others	X	X	X	X	X	X	X	X	X	X% p.a.
Total	X	X	X	X	X	X	X	X	X	X% p.a.

Table: Demand in Germany from 2020 to 2032 – split by application

Revenues	2020	2021	2022	2023p	2024p	2025p	2026p	2027p	2032p	2022-2032
Million USD	X	X	X	X	X	X	X	X	X	X% p.a.
Million EUR	X	X	X	X	X	X	X	X	X	X% p.a.

Table: Revenues generated in Germany from 2020to 2032, million USD and million EUR

in 1,000 tonnes	2020	2021	2022	2023p	2024p	2025p	2026p	2027p	2032p	2022-2032
PLA	X	X	X	X	X	X	X	X	X	X% p.a.
Starch	X	X	X	X	X	X	X	X	X	X% p.a.
PHA	X	X	X	X	X	X	X	X	X	X% p.a.
Other biodegradable	X	X	X	X	X	X	X	X	X	X% p.a.
Non biodegradable	X	X	X	X	X	X	X	X	X	X% p.a.
Total	X	X	X	X	X	X	X	X	X	X% p.a.

Table: Demand in Germany from 2020 to 2032 – split by product

in 1,000 tonnes	2020	2021	2022	2023p	2024p	2025p	2026p	2027p	2032p	2022-2032
Rigid packaging	X	X	X	X	X	X	X	X	X	X% p.a.
Flexible packaging	X	X	X	X	X	X	X	X	X	X% p.a.
Total	X	X	X	X	X	X	X	X	X	X% p.a.

Table: Demand in Germany from 2020 to 2032 – split by type

The application area "Food & beverages" accounted for the largest share of the total demand for bioplastics for packaging in 2022. Demand in the area "Cosmetics & Pharma" is expected to develop most dynamically over the next ten years with a growth rate of X% p.a.

Table of Contents (2/3)

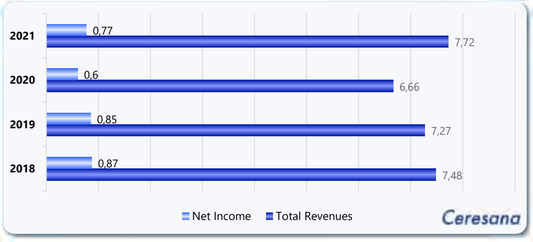
Table of Contents (3/3)

3 Company Profiles*

Mondi plc

Ground Floor, Building 5, The Heights
Brooklands, Weybridge, Surrey KT13 0NY
United Kingdom
Tel.: +44 1932 826 300
Web: www.mondigroup.com

Financial Key Data (in billion EUR)



*Financial Key Data from Mondi Group

General Information about the Company

Divisions, Product Range	The product portfolio includes: • Flexible packaging, bags and pouches • Release liners • Functional films • Corrugated solutions • Industrial bags • Barrier coatings • Specialty kraft paper • Sack kraft paper • Containerboard • Office and professional printing papers
Production Sites	The company operates approximately 100 production sites located across 30 countries in Europe, North and South America, Africa, and Asia.
Profile Summary	Mondi plc was founded in 1967 by Mondi South Africa and is based in Weybridge, Surrey, United Kingdom. Mondi engages in packaging and paper operations. In 2021, the company employed about 26,822 people. The same year, Mondi held total assets amounting to EUR 9.26 billion. Divided by product field, 36% of sales in 2021 were generated with flexible packaging, 32% with corrugated packaging, 21% with uncoated fine paper, and 11% with engineering materials. Divided by geographic region, 37% of the 2021 net sales were generated in Western Europe, 26% in Emerging Europe, 9% in Russia, 9% in Africa, 10% in North America, and 7% in Asia and Australia. The company is listed on the London Stock Exchange. In 2022, Mondi completed the merger of Mondi Tire Kutsan and Mondi Olmuksan in Turkey. The company is certified according to ISO 9001 and ISO 14001. Additionally, some production plants are ISO 45001 and ISO 50001 certified.

Specific Information about Bioplastics Packaging

Mondi has large bioplastic packaging segment which includes:

- Recyclable barrier packs and pouches
- Biobased films
- Valve bags
- Packaging solution made from proprietary biopolymers offered under the brand name Sustainex

*Note: The profiles are assigned to the country in which the company or holding is headquartered. Profiles also include JVs and subsidiaries.

Ceresana – Your Partner in Market Research

As one of the world's leading institutes for market research, we have been specializing in the areas of mobility, chemicals, plastics, packaging, industrial goods, and bio-economy for the past 21 years. 10.000 customers have already benefited from our analyses and forecasts. You too can choose from our wide range of market studies to gain the knowledge base for your company success!

Our market studies provide you with the knowledge to...

... further develop your business

... gain competitive advantages

... assess investments and innovations

... identify new business partners, target groups, and markets

... anticipate risks and opportunities

... forecast supply and demand

... analyze value chains

... determine future trends and technologies

In short: strengthen your company.

Among the 10,000 customers who already trust us are:

Thank you for your trust!

Who Benefits in Particular:

- Producers, processors, traders, suppliers, as well as engineering companies
- Associations, institutes, consultants, banks, investors, founders, freelancers, entrepeneurs, and service providers
- Executive boards, finance, business development, strategic planning, market research, marketing, sales, distribution, R&D, and procurement

MADE IN GERMANY

Ceresana
Mainaustr. 34
78464 Konstanz
Germany

++49 7531 94297 0

info@ceresana.com

www.ceresana.com

If you have any questions, please do not hesitate to contact us.

The list below includes a selection of our current studies.
Click on any topic to receive further details:

Ceresana
Market Research Since 2002

Bio-Economy

- Biobased Adhesives - World
- Biobased Insulation Material - World
- Biobased Paints and Coatings - World
- Biobased Solvents - World
- Biobased Surfactants - World
- Bioplastic Packaging - World
- Bioplastic Films - World
- Bioplastics - World
- Polylactic Acid (PLA) - World

Chemicals

- Biocides - World
- Carbon Black - World
- Chelating Agents - World
- Fillers - Europe
- Fillers - World
- Flame Retardants - World
- Pigments - World
- Plastic Additives - World
- Plasticizers - World
- Solvents - World
- Stabilizers - World
- Surfactants - World
- Titanium Dioxide (TiO2) - World

Packaging

- Bags, Sacks & Pouches - Europe
- Bags, Sacks & Pouches - World
- Corrugated Board & Solid Board - Europe
- Flexible Packaging - Europe
- Food Packaging - Europe
- Labels - Europe
- Plastic Caps & Closures - Europe
- Plastic Caps & Closures - World
- Plastic Containers - Europe
- Plastic Films - Europe
- Plastic Films - World
- Rigid Plastic Packaging - World

Industry

- Adhesives - Europe
- Adhesives - World
- Insulation Material - Europe
- Insulation Material - World
- Paints & Coatings - Europe
- Paints & Coatings - World
- Plastic Extrusion - Europe
- Plastic Injection - Europe
- Plastic Pipes - Europe
- Plastic Pipes - World
- Plastic Windows - World
- Printing Inks - Europe
- Printing Inks - World
- Windows & Doors - Europe

Plastics

- Composites (CFRP & GFRP) - World
- Engineering Plastics - World
- Expandable Polystyrene (EPS) - World
- Masterbatches - World
- Plastics - Europe
- Plastics - World
- Polyethylene (HDPE) - World
- Polyethylene (LDPE) - World
- Polyethylene (LLDPE) - World
- Polypropylene - World
- Polystyrene & EPS - World
- Polyvinyl Chloride (PVC) - World
- Silicones - World
- Synthetic Rubber - World
- Thermoplastic Elastomers (TPE) - World

Mobility

- Automotive Coatings - World
- Automotive Plastics - Europe
- Automotive Plastics - World
- Hybrid & Electric Cars - Europe

To our Store