

Market Study: Plastic Injection



Dear readers,

Nowadays, information is available at the push of a button, always, and in overwhelming amounts. But what is the best way to find the crucial data amongst all that information? That is why several thousand companies use the knowledge of our employees. Based on their extensive experience, they provide decisive data for the benefit of their customers. The clearly arranged and practice-oriented studies of Ceresana offer precise analyses and well-founded forecasts - also for your markets!

Why you should make use of our knowledge

Our time-tested understanding of the markets helps you to even better assess potential chances, new products and technologies, but also your competitors. Use this knowledge to shape an evermore effective and efficient future for your company. We provide you with reliable forecasts regarding products

and markets. Get valuable information about global trends as well as opportunities and risks. Our studies will save you time and money and help you prevent costly wrong decisions.

We are your market experts

Ceresana is the most trusted market research company for the industrial sector. In addition to single-client studies, our clients also profit from already more than 100 multi-client market studies.

We would be pleased to assist your company in this challenging market environment!



Yours faithfully, Oliver Kutsch

This study is useful for:

- Manufacturers and distributors of polypropylene (PP), polyethylene (LDPE, LLDPE, HDPE), polyamides (PA), acrylonitrile butadiene styrene (ABS), polystyrene (PS), polycarbonate (PC), other types of plastics
- Producers of packaging, for example cans, mugs, bowls, boxes, and closures, construction products, vehicle parts, electrical and electronic parts, products for the agricultural industry, medical technology, mechanical engineering and construction, household products, toys, sports goods, and garden products
- Manufacturers of auxiliaries and additives such as pigments, fillers, plasticizers
- Associations and institutes, executive board, technology and production, strategic planning, R&D, market research, marketing, sales and distribution, procurement

Our studies - Your benefits

- **Gain new customers**
Our studies show who potential new customers are and where you can find them
- **Locate new procurement markets**
Recognize better or alternative sources of supply
- **Improve your understanding of your competitors**
Who exactly are your competitors - and what are their strengths and weaknesses
- **Obtain a more detailed picture of your segment**
Learn which time is the best for entering or leaving a market
- **Have a look at the future**
Find out if new investments and technologies are worthwhile and how to gain access to future markets. We also show possible market scenarios
- **Recognize opportunities and risks**
Identify opportunities and risks on your target markets in time

In this brochure you will find the following information:

- An introduction on page 3
- A summary of the table of contents on page 4
- Following this, there are example pages from the study
- Please use the form on the last page to easily order your copy or a free reading sample!

Injection molding is one of the most important processing methods in the plastics industry: Every year, almost 55 million tonnes of plastics are processed worldwide to almost any kind of molded part. Since the use of this method allows for a flexibility of size and form, possibilities of plastic design expanded enormously. Injection molding enables the substitution of traditional materials due to the low weight and the freedom of design. The market research company Ceresana analyzed the global market for plastics for injection molding.

In 2015, about 54% of the plastics used for injection molding were consumed in the region Asia-Pacific; North America and Western Europe followed with market shares of 15.4% and 14.3%. The most important sales market for injection molded products is the packaging industry which mainly protects food: containers, cans, mugs, bowls, boxes, and closures of any kind. Packaging made of plastics offers numerous advantages over other materials. Besides their low weight and a reduced fracture susceptibility, plastic packaging can profit in some segments from its transparency or resistance against chemicals. The second largest and at the same time most dynamically developing sales market are products for the transportation industry. From 2015 to 2023, Ceresana expects global demand in this application area to increase by 3.7% per year.

The present study analyzes the market for plastics used for injection molding, particularly for the plastic types polypropylene (PP), polyethylene (LDPE, LLDPE, HDPE), polyamide (PA), acrylonitrile butadiene styrene (ABS), polystyrene (PS), polycarbonate (PC), and other products. Polypropylene (PP) is the most important plastic type for injection molding: Over the past eight years, global demand for products made of PP rose by an average of 3.8% per year. The second most important plastic type for injection molding is polyethylene with a market share of 20%. However, there are significant differences within the particular sales markets. For example, the share of demand for polypropylene in the segment packaging amounts to almost 70% while its share in the construction industry only totals 12%.

The Study in Brief:

Chapter 1 provides a presentation and analysis of the market for plastics for injection molding – including forecasts up to 2023. Data on demand and revenues are analyzed for the regions Western Europe, Eastern Europe, North America, South America, Asia-Pacific, the Middle East, and Africa.

Chapter 2 provides market data for the 16 most important countries, that is, country-specific information on demand and revenues. Demand is analyzed in detail split by several application areas and product types.

Chapter 3 thoroughly examines the application areas for plastics for injection molding: packaging, construction industry, transportation, electrical and electronics, industrial products, other applications. These sales markets are split by both the world regions and the most important countries. Furthermore, demand for the particular plastic types split by application areas is given.

Chapter 4 deals with demand for the particular types of plastics: polypropylene (PP), polyethylene (LDPE, LLDPE, HDPE), polyamide (PA), acrylonitrile butadiene styrene (ABS), polystyrene (PS), polycarbonate (PC), other types of plastics.

1 Market Data

1.1 World

1.1.1 Demand

1.1.2 Revenues

1.2 Western Europe

1.3 Eastern Europe

1.4 North America

1.5 South America

1.6 Asia-Pacific

1.7 Middle East

1.8 Africa

2 Country Profiles

2.1 Western Europe

2.1.1 France

2.1.2 Germany

2.1.3 Italy

2.1.4 Spain

2.1.5 United Kingdom

2.1.6 Other Western Europe

2.2 Eastern Europe

2.2.1 Poland

2.2.2 Russia

2.2.3 Turkey

2.2.4 Other Eastern Europe

2.3 North America

2.3.1 Canada

2.3.2 Mexico

2.3.3 USA

2.4 South America

2.4.1 Brazil

2.4.2 Other South America

2.5 Asia-Pacific

2.5.1 China

2.5.2 India

2.5.3 Japan

2.5.4 South Korea

2.5.5 Other Asia-Pacific

3 Applications

3.1 World

3.1.1 Packaging

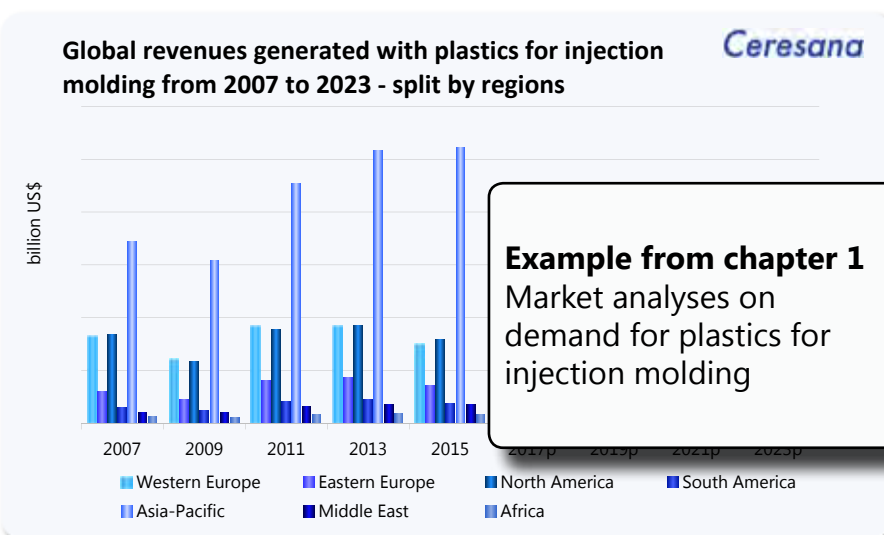
3.1.2 Construction Industry

3.1.3 Transportation

3.1.4 Electrical and Electronics

3.1.5 Industrial Products

3.1.6 Other Applications



3.2 Western Europe

3.2.1 Packaging

3.2.2 Construction Industry

3.2.3 Transportation

3.2.4 Electrical and Electronics

3.2.5 Industrial Products

3.2.6 Other Applications

3.3 Eastern Europe

3.3.1 Packaging

3.3.2 Construction Industry

3.3.3 Transportation

3.3.4 Electrical and Electronics

3.3.5 Industrial Products

3.3.6 Other Applications

3.4 North America

3.4.1 Packaging

3.4.2 Construction Industry

3.4.3 Transportation

3.4.4 Electrical and Electronics

3.4.5 Industrial Products

3.4.6 Other Applications

3.5 South America

3.5.1 Packaging

3.5.2 Construction Industry

3.5.3 Transportation

3.5.4 Electrical and Electronics

3.5.5 Industrial Products

3.5.6 Other Applications

3.6 Asia-Pacific

3.6.1 Packaging

3.6.2 Construction Industry

3.6.3 Transportation

3.6.4 Electrical and Electronics

3.6.5 Industrial Products

3.6.6 Other Applications

3.7 Middle East

3.8 Africa

4 Products

4.1 Polypropylene (PP)

4.1.1 World

4.1.2 Western Europe

4.1.3 Eastern Europe

4.1.4 North America

4.1.5 South America

4.1.6 Asia-Pacific

4.1.7 Middle East

4.1.8 Africa

4.2 Polyethylene (LDPE, LLDPE, HDPE)

...

4.3 Polyamide (PA)

...

4.4 Acrylonitrile Butadiene Styrene (ABS)

...

4.5 Polystyrene (PS)

...

4.6 Polycarbonate (PC)

...

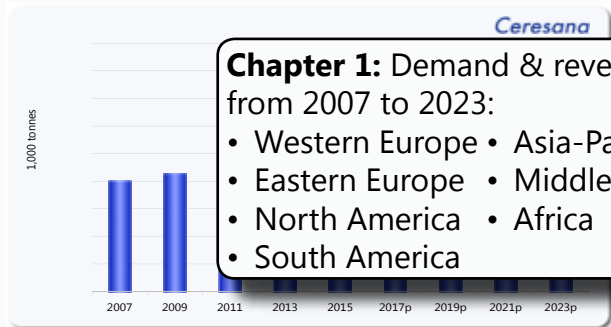
4.7 Other Types of Plastics

...

1.6 Asia-Pacific

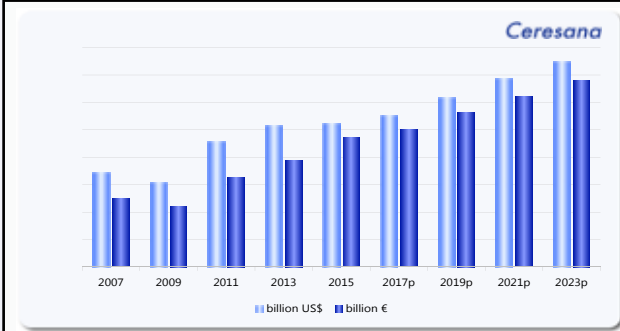
In 2015, Asia-Pacific processed about X million tonnes of plastics in injection molding. Since 2007, market volume rose at a rate of X% p.a. Compared to other regions of the world, we expect the Asian-Pacific market to continue to develop at high growth rates. For the period 2015 to 2023, we forecast overall demand to increase by about X% p.a. to about X million tonnes.

In 2015, about USD X billion were generated with the sale of plastics for injection molding in Asia-Pacific. Thus, this region accounted for about X% of total global revenues. We forecast market value in this region to increase by, on average, X% p.a. to approx. USD X billion in 2023.



Graph: Demand for plastics for injection molding in Asia-Pacific from 2007 to 2023

In 2015, China recorded a market volume of X million tonnes and thus accounted for more than half of total regional demand. Japan ranked second, followed by India and South Korea. Aggregated consumption of other countries in that region (Thailand, Vietnam, Australia, the Philippines, Taiwan, Singapore) totaled X million tonnes in 2015. We forecast India to develop at the highest growth rates of X% p.a. until 2023.



Graph: Revenues generated with plastics for injection molding in Asia-Pacific from 2007 to 2023 in billion USD and billion EUR

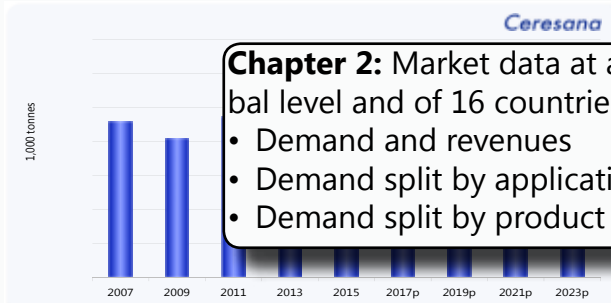
in million tonnes	2007	2009	2011	2013	2015	2017p	2019p	2021p	2023p	2015 - 2023
China	X	X	X	X	X	X	X	X	X	X% p.a.
India	X	X	X	X	X	X	X	X	X	X% p.a.
Japan	X	X	X	X	X	X	X	X	X	X% p.a.
South Korea	X	X	X	X	X	X	X	X	X	X% p.a.
Other	X	X	X	X	X	X	X	X	X	X% p.a.
Total	X	X	X	X	X	X	X	X	X	X% p.a.

Table: Demand for plastics for injection molding in Asia-Pacific from 2007 to 2023 – split by major countries

2.2.1 Poland

Demand for plastics for injection molding in Poland amounted to approx. X tonnes in 2015. We forecast Polish demand to increase by X% p.a. to approx. X tonnes in 2023. Market value in Poland totaled EUR X billion in 2015. We expect revenues to amount to approx. EUR X billion in 2023. The packaging industry constituted the largest sales market in Poland in 2015. We forecast the highest growth rate of, on average, X% p.a. in the next eight years for the segment electrical and electronics.

The most important product is PP which registered a market volume of X tonnes in 2015, followed by PE of which X tonnes were processed. Market volume of all other products was much lower. Demand for PC will increase at a growth rate of X% p.a. to X tonnes.



Graph: Demand for plastics for injection molding in Poland from 2007 to 2023

In 2014, Poland was already able to reach the fourth best result in the EU with a growth of 3.3%. The following year, Poland was also among the six EU countries with the highest growth, accounting for a GDP growth of 3.5%. Furthermore, the government plans to maintain a growth of 3.5% continuously until 2017. The strong domestic demand and foreign trade is a guarantor for the positive economic development. Due to a decreasing unemployment rate, an announced increase of the tax allowance and

additional payment for children, prospects for further rises of private consumption are very good. We also expect further increases in the gross fixed capital formation in 2016 and 2017.

in 1,000 tonnes	2007	2009	2011	2013	2015	2017p	2019p	2021p	2023p	2015 - 2023
Packaging	X	X	X	X	X	X	X	X	X	X% p.a.
Construction Industry	X	X	X	X	X	X	X	X	X	X% p.a.
Transportation	X	X	X	X	X	X	X	X	X	X% p.a.
Electrical and Electronics	X	X	X	X	X	X	X	X	X	X% p.a.
Industrial Products	X	X	X	X	X	X	X	X	X	X% p.a.
Other	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 for plastics for injection molding in Poland from 2007 to 2023 – split by applications

Due to the rising private consumption, demand for products in the segment E&E will also develop positively. This development is supported by new product launches in the segment consumer electronics. In the past, a growth of demand on the market for consumer electronics was observable which was caused by innovative new products, such as phablets.

The year 2015 was a very positive year for the Polish automotive industry. Both new registrations of passenger cars as well as of light commercial vehicles increased strongly. Demand for vehicles continued to rise in the first months of 2016. Overall, 0.66 million vehicles were produced in Poland. Until 2023, we forecast another rise in production as well which will cause an increase in demand for plastics in this segment. As a result of increasing private consumption and a change in lifestyle, demand for packaged consumer goods and certain types of beverages rises, which leads to an increased consumption of plastic containers. Poland exports a large amount of cosmetic products to other East and West European countries. Skin care products and

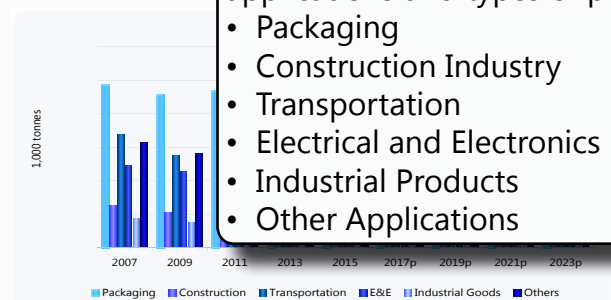
common to pack foods in plastic containers rather than in containers made of other materials. These substitution effects have a further stabilizing effect on the market for plastic containers in the food sector. Moreover, the introduction of new products that find their way to Eastern Europe via North America and/or Western Europe will provide additional impulses in this segment in the future. Polish construction industry is expected to experience a more positive development again in the upcoming years. Construction work in 2013 was significantly below the level of the previous year - in 2014 however, this sector developed positively again. In 2015, building construction was stabilizing in Poland and the number of new constructions rose. We expect another significant leap in regard to this to approx. 174,000 completed apartments in 2016 (for comparison: in 2015 approx. 150,000). The positive economic situation leads to a rise of investments and new hotels, office buildings, shopping centers, and storage facilities are built. Additional storage facilities are also needed due to the growing online trade. The subsequent refurbishment of old buildings in particular offers significant potential as well.

in 1.000 tonnes	2007	2009	2011	2013	2015	2017p	2019p	2021p	2023p	2015 - 2023
PP	X	X	X	X	X	X	X	X	X	X% p.a.
PE	X	X	X	X	X	X	X	X	X	X% p.a.
PA	X	X	X	X	X	X	X	X	X	X% p.a.
ABS	X	X	X	X	X	X	X	X	X	X% p.a.
PS	X	X	X	X	X	X	X	X	X	X% p.a.
PC	X	X	X	X	X	X	X	X	X	X% p.a.
Other	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 for plastics for injection molding in Poland from 2007 to 2023 – split by types of plastics

3.2 Applications – Western Europe

About X% of the X million tonnes of plastics for injection molding that were consumed in Western Europe in 2015 were utilized in the packaging industry. The segment transportation ranked second. Within the next eight years, we expect demand for plastics for injection molding in the segment electrical and electronics to increase significantly.



Graph: Demand for plastics for injection molding in Western Europe from 2007 to 2023 – split by applications

in million tonnes	2007	2009	2011	2013	2015	2017p	2019p	2021p	2023p	2015 - 2023
Packaging	X	X	X	X	X	X	X	X	X	X% p.a.
Construction Industry	X	X	X	X	X	X	X	X	X	X% p.a.
Transportation	X	X	X	X	X	X	X	X	X	X% p.a.
Electrical and Electronics	X	X	X	X	X	X	X	X	X	X% p.a.
Industrial Products	X	X	X	X	X	X	X	X	X	X% p.a.
Other	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 for plastics for injection molding in Western Europe from 2007 to 2023 – split by applications

3.2.1 Packaging

About X million tonnes of plastics for injection molding were utilized in the West European packaging industry in 2015. Germany had the highest demand. Producers in Italy ranked second, followed by France. We expect the highest relative increase of X% p.a. until 2023 for Germany. The group of other West European countries will also account for high growth rates. Following an increase of X% per year, West European demand in the packaging industry will amount to approx. X million tonnes in 2023.

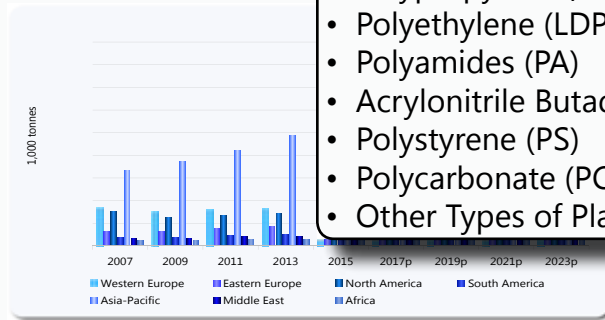
in 1.000 tonnes	2007	2009	2011	2013	2015	2017p	2019p	2021p	2023p	2015 - 2023
Germany	X	X	X	X	X	X	X	X	X	X% p.a.
France	X	X	X	X	X	X	X	X	X	X% p.a.
United Kingdom	X	X	X	X	X	X	X	X	X	X% p.a.
Italy	X	X	X	X	X	X	X	X	X	X% p.a.
Spain	X	X	X	X	X	X	X	X	X	X% p.a.
Other	X	X	X	X	X	X	X	X	X	X% p.a.
Total	X	X	X	X	X	X	X	X	X	X% p.a.

Table: Demand for plastics for injection molding in Western Europe from 2007 to 2023 – split by major countries

The most important product is PP which accounted for a market volume of X million tonnes in 2015. X tonnes of PE were processed. Market volume of all other products was much lower. We do not expect any significant changes in the ranking until 2023. Demand for PP will increase at a growth rate of X% p.a. to X million tonnes.

4.1 Products - Polypropylene (PP)

Over the past eight years, global demand for PP for injection molding rose by an average of X% per year. Out of the X million tonnes of PP used worldwide in 2015, about half were used in Asia-Pacific. Thus, this region had a lead over Western Europe and North America. The highest relative increase at rates of X% p.a. between 2015 and 2023 is anticipated for Asia-Pacific. Consumption volume in this country is likely to rise to X million tonnes. The least dynamic growth rate of X% per year is anticipated for Western Europe. We forecast for the global PP market for injection molding a demand of about X million tonnes in 2023. According to 2015 and 2023.



Graph: Global polypropylene (PP) demand from 2007 to 2023 – split by regions

PP is a semi-crystalline thermoplastic polymer that is compatible with many processing techniques and used in a wide variety of applications in virtually all of the plastics end-use markets. It is a polyolefin or saturated polymer made of the monomer propylene by polymerization using a catalyst. PP is rugged and exceptionally resistant to many chemical solvents, bases, and acids. Polypropylene is produced commercially in different forms, depending on the properties desired.

Chapter 4: Demand for the plastic types:

- Polypropylene (PP)
- Polyethylene (LDPE, LLDPE, HDPE)
- Polyamides (PA)
- Acrylonitrile Butadiene Styrene (ABS)
- Polystyrene (PS)
- Polycarbonate (PC)
- Other Types of Plastics

Thank you very much for your confidence!

For more than a decade, we have been supplying several 1,000 customers from more than 60 countries: medium-sized companies, multinational enterprises as well as associations.

Market analyses for your strategic management.



**Do you have any further questions?
Please do not hesitate to contact us!**

Ceresana
Mainaustr. 34, 78464 Constance, Germany
Phone: +49 7531 94293-0 Fax +49 7531 94293-27
E-Mail: info@ceresana.com

Order now your

- market studies or
- free reading samples

online at www.ceresana.com/en, via fax, phone or e-mail - quickly and easily.

Order online now!

The list includes a selection of our current market studies. By clicking on the respective topic, you will receive further details:

Mobility

[Automotive Coatings - World](#)
[Automotive Plastics - Europe](#)
[Automotive Plastics - World](#)
[Hybrid & Electric Cars - Europe](#)

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](#)

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](#)

[Biobased Packaging - World](#)
[Bioplastics - World](#)
[Polylactic Acid \(PLA\) - World](#)
[Starch Based Plastics - World](#)

[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](#)

[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](#)
[Plastic Packaging for Cosmetics - Europe](#)
[Rigid Metal Packaging - Europe](#)
[Rigid Plastic Packaging - World](#)

Bio-Economy

Industry

Packaging