

BIOPLASTICS

facts and figures






BIOPLASTICS AND THE EU'S BIOECONOMY

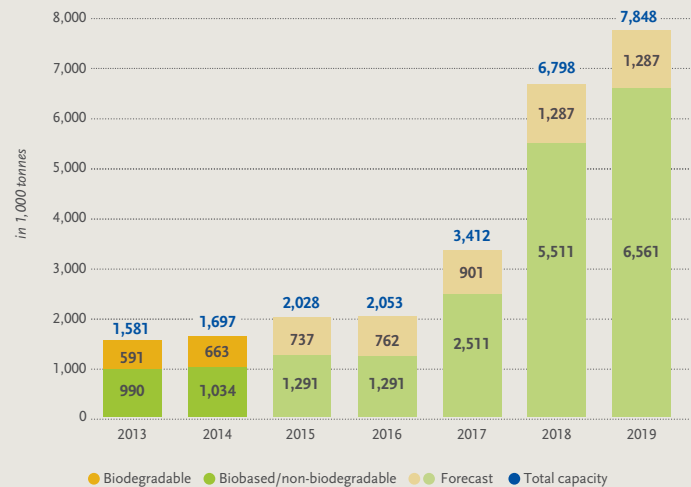
Today, the European bioeconomy sectors  are worth **2 TRILLION EUROS** in annual turnover and account for **22 MILLION JOBS** in the EU. That is approx. **9% of the EU's** workforce.* 

*Source: European Bioplastics 2012; EC-Communication "Innovating for Sustainable Growth: A Bioeconomy for Europe" 13.02.2012

BIOPLASTICS are (partly or fully) biobased, biodegradable, or both. The global bioplastics production capacity is **set to grow 350%** by 2019. 

BIOPLASTICS have been designated a **LEAD MARKET** by the European Commission. The bioplastic market's immense growth will help drive the **further evolution of a bioeconomy** in Europe.

Global production capacities of bioplastics



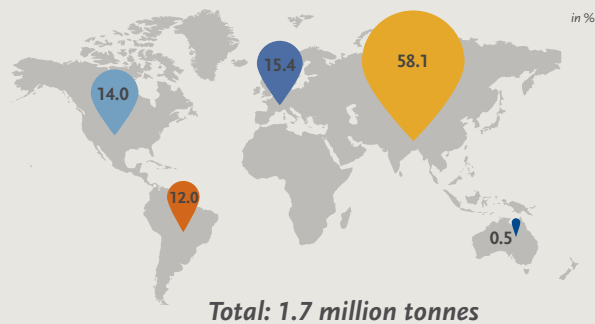
Source: European Bioplastics, Institute for Bioplastics and Biocomposites, nowa-Institute (2015). More information: www.bio-based.eu/markets and www.downloads.ifbb-hannover.de



POLICY SUPPORT DECISIVE FOR MARKET SUCCESS

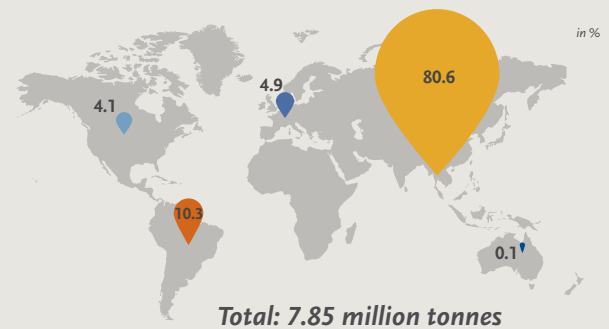
BIOPLASTIC production capacities are growing fastest outside of Europe. In order to attract investments and to secure its place amongst the top-players in the bioplastics market, the EU needs to implement favorable framework conditions.

Global production capacities of bioplastics in 2014 (by region)



- Asia
- South America
- North America
- Europe
- Australia/Oceania

Global production capacities of bioplastics in 2019 (by region)





ALL BIOPLASTIC MATERIAL TYPES DEMONSTRATE HIGH GROWTH RATES THROUGHOUT ALL MARKET SEGMENTS

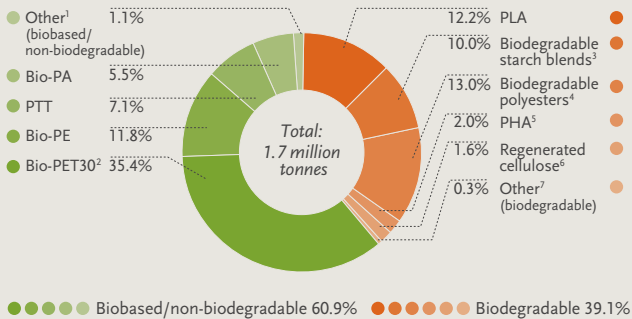
BIOPLASTICS are *a broad family of materials* with widely varying properties.

Ultimately, **BIOPLASTICS** can find a place *in all market segments* where conventional plastics are used. In many of these market segments, *bioplastic alternatives are already available* today.

Biodegradable BIOPLASTICS are *a GROWING NICHE MARKET*.

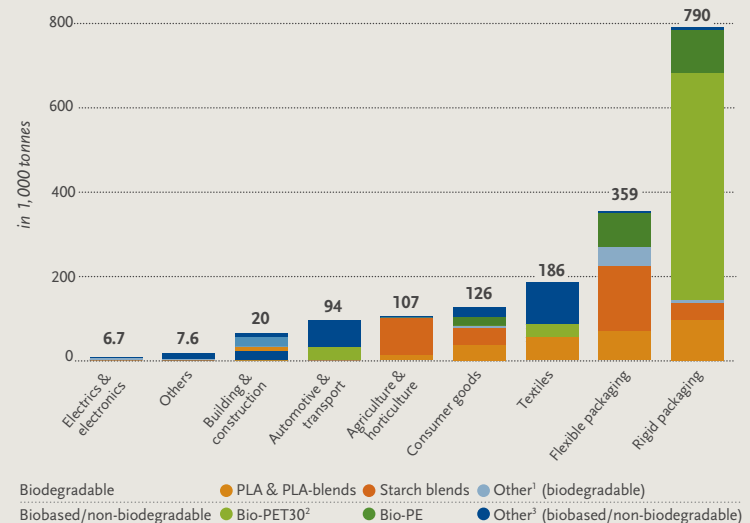
They are often used in short-lived applications such as biowaste bags or packaging of fresh produce.

Global production capacities of bioplastics 2014 (by material)



¹Contains durable starch blends, Bio-PC, Bio-TPE, Bio-PUR (except thermosets); ²Biobased content amounts to 30%; ³Blend components incl. in main materials; ⁴Contains fossil-based PBAT, PBS, PCL; ⁵Incl. Newlight Technologies (CO₂-based); ⁶Compostable hydrated cellulose foils; ⁷Biodegradable cellulose ester

Global production capacities of bioplastics 2014 (by market segment)



¹Contains regenerated cellulose and biodegradable cellulose ester; ²Biobased content amounts to 30%; ³Contains durable starch blends, Bio-PC, Bio-TPE, Bio-PUR (except thermosets), Bio-PA, PTT

DROP-IN SOLUTIONS represent the **single largest sector** of the global bioplastics production. They are (partly) **biobased, non-biodegradable commodity plastics** such as PE, PET, or PP, and can be **easily recycled along their conventional counterparts**.

Source: European Bioplastics, Institute for Bioplastics and Biocomposites, nova-Institute (2015).
 More information: www.bio-based.eu/markets and www.downloads.ifbb-hannover.de



BIOMASS FOR BIOPLASTICS – EFFICIENT USE OF FEEDSTOCK & GOOD AGRICULTURAL PRACTICE

BIOPLASTICS rely on **about 0.01%** of the global agricultural area of **5 billion ha**. This compares to the size of an average **CHERRY TOMATO vis-à-vis the Eiffel Tower**.

A glance at the global agricultural area makes it abundantly clear: The area used to grow crops for **BIOPLASTICS is nowhere near being in competition TO FOOD AND FEED**.



Land use for bioplastics 2014 and 2019



Food & Feed
1.24 billion ha = 26%*

Material use***
106 million ha = 2%*

Biofuels
53 million ha = 1%*

Bioplastics
2014: 0.68 million ha ≈ 0.01%*
2019: 1.4 million ha ≈ 0.02%*

GLOBAL AGRICULTURAL AREA

Pasture
3.5 billion ha = 70%*

Arable land**
1.4 billion ha = 30%*

Source: European Bioplastics, Institute for Bioplastics and Biocomposites, nova-Institute (2015).
More information: www.bio-based.eu/markets and www.downloads.ifbb-hannover.de

* In relation to global agricultural area
** Also includes approx. 1% fallow land
*** Land-use for bioplastics is part of the 2% material use

Increasing the efficiency of feedstock and agricultural technology is continuously enhancing **good agricultural practice**. What's more: Today, such best practise is also ensured through the emergence of **reliable and independent sustainability certification** schemes such as ISCC, WLC or BonSucro.



CONTACT

You want to learn more about the advantages and applications of bioplastics?

European Bioplastics
Marienstraße 19-20
10117 Berlin

Phone: +49 30 28 48 23 50
Email: info@european-bioplastics.org
Email: press@european-bioplastics.org

For more information please visit our website:
www.european-bioplastics.org

Or follow us on twitter:
twitter.com/EUBioplastics



Or subscribe to our channel on youtube:
youtube.com/EuropeanBioplastics

