

Position of European Bioplastics concerning

BIOPLASTICS AND THE CIRCULAR ECONOMY

European Bioplastics (EUBP) welcomes the transition away from a linear to a circular economy, whilst urging legislators to consider measures, which accelerate the sustainable development of Europe's bio-economy by promoting the use of bio-based products and the separate collection of biowaste when revising the draft Circular Economy Package and Action Plan.

Bioplastics and circular economy

According to the Ellen MacArthur Foundation circular economy is "restorative and regenerative by design, which aims to keep products, components and materials at their highest utility and value at all times, distinguishing between technical and biological cycles". With this definition in mind, bioplastics fit in this new economic concept as they help to break away from the linear economy characterized by "make, use, dispose" in favour of a more circular model based on "reuse, recycle or biodegrade". Bioplastics, as part of the bioeconomy, are a perfect illustration of circularity in that they regenerate CO₂ and use renewable raw materials to make more sustainable everyday products.

Nevertheless, the circular economy needs to focus on both the technical cycle and the biological one. The production of bioplastics is the result of a common effort of all stakeholders involved in our value chain: agriculture, R&D, green chemistry and waste management. This integration is the logic that underpins the entire bioeconomy, which is focussed around advanced biorefineries.

Bioplastics: a biorefined product

There is no doubt that the chemical industry has been investing in the bioeconomy and the production of bioplastics in recent years. The main focus of the industry's initiative within the bioeconomy lies on advanced biorefineries, which use chemistry to convert renewable resources into sustainable chemicals, materials and fuels.

Just as traditional refineries, biorefineries maximize the use and value of feedstock and exploit all of the elements of the feedstock, recycling secondary products and wastes into valuable products, often using bi-products which fuel the production process. Nevertheless, there is a decisive difference between refineries and biorefineries: the first one uses non-renewable, fossil materials, the second bases its production on renewable feedstock.

Biorefineries can play an important role for the development of local growth, specifically through:

- Integration with the local agronomical value chain, boosting cooperation – especially in R&D projects – among the two sectors,
- Industrial and economic development, thereby creation of new jobs.

But biorefineries have wider benefits. They can contribute to achieving national and international energetic objectives (using fractions of biomass for the energy necessary for the production process) and environmental targets, such as the reduction of GHG emissions and the production of sustainable products. They also facilitate the development of standards and certification schemes.

Circular Economy Package: an opportunity for bioplastics

The benefits of bioplastics, materials that are bio-based, biodegradable, or both, are clear: they contribute positively to our economy, our society and our environment. With a current share of almost one percent of the global plastics market, they represent an economically innovative sector that is growing between 20 and 100 percent per year. Investment in production and R&D in Europe in the bioplastics sector depends on a long-term policy framework which supports the use, re-use and recycling of these materials.

A supportive policy framework for the circular and bio-based economy along the value-chain is crucial to the development of a strong and robust bioplastics sector. To reinforce the EU's position as a front-runner of resource efficiency and green growth, EUBP calls on the Commission to prioritise the following areas:

1. Improving waste management efficiency by promoting the separate collection of biowaste and recyclable plastic;
2. Address legal and market barriers hampering the uptake of bioplastics.

Improving waste management efficiency by promoting the separate collection of biowaste and recyclable plastic

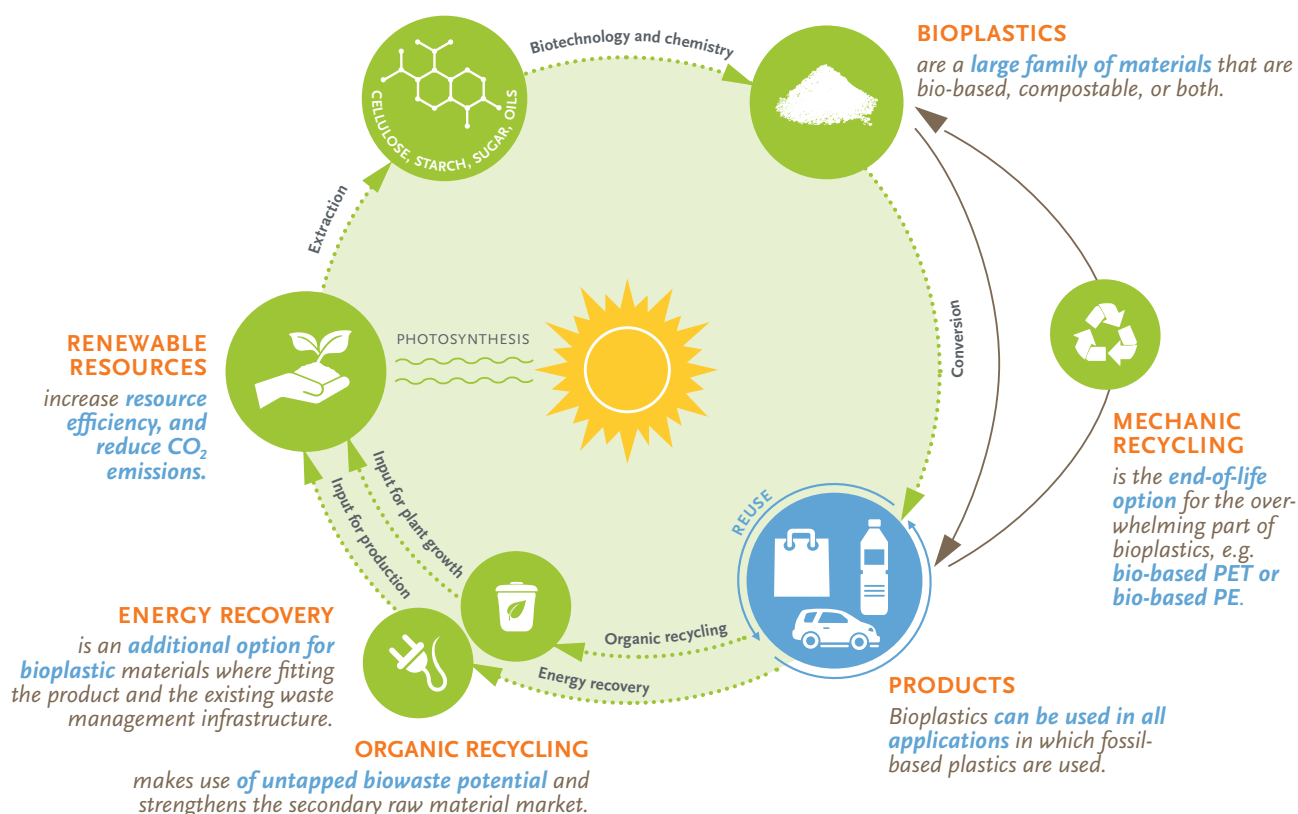
Better use of compostable plastics will help to divert organic waste from landfills and incineration to organic recycling. What is more, it will make a decisive contribution to collect more biowaste. The unused potential is about 100 million tonnes of biowaste – a valuable resource resting untapped as a valuable bio-based resource and secondary raw material.

EUBP welcomes the emphasis on higher recycling targets for plastics contained within the draft Circular Economy Package, but this will only be achieved if Member States implement separate collection of recyclable plastic. Furthermore, a single market for plastic waste is necessary in order to facilitate the cross-border movement and recycling of such materials.

EUBP calls on the Commission to consider the following points when amending the Waste Framework Directive (WFD):

- Including organic recycling - in the form of composting and anaerobic digestion - in the WFD's definition of recycling;
- Including waste with biodegradability properties in the bio-waste definition of the WFD.
- Obliging Member States to separately collect biowaste by January 2020, at the latest;
- Requesting Member States to support the organic recycling of biowaste;
- Obliging Member States to separately collect recyclable plastic by January 2020, at the latest.

Bioplastics – closing the loop



Address legal and market barriers hampering the uptake of bioplastics

Using biomass for industrial purposes, such as the production of bioplastics, can help provide solutions to the current resource efficiency challenges that the EU is facing. A level playing field with other bio-feedstock industries based on value creation and environmental benefits is required for the bioplastics sector to grow sustainably as is a policy framework at European and Member State level which supports the development of a dynamic waste management sector and the market for secondary raw materials. Finally, in order to make use of the full potential of the bioplastics sector, economic measures that promote the market introduction of products with bio-based content and products that offer additional waste management solutions, such as organic recycling, should be considered.

EUBP calls on the Commission to consider the following points while amending the Packaging and Packaging Waste Directive (PPWD):

- Including a definition of the terms bio-based and biomass in packaging legislation;
- Encouraging Member States to implement measures that promote packaging made from bio-based materials, thereby contributing to a genuinely competitive and highly innovative bio-economy.
- Assessing by 2017 the use of environmentally friendly food packaging, including an assessment of the feasibility of gradually replacing food packaging with bio-based and/or biodegradable, compostable material in accordance with European standards.

Action Plan: European Bioplastic's view

The Strategy on Plastics should include:

- Creating equal access to sustainably grown and affordable bio-based feedstock for bio-based products, so that EU Member States can attract investments from global bioplastic companies;
- Recommending that supporting instruments at European level are equally bestowed to industries using biomass;
- Assess the use of biodegradable and compostable plastics in applications where contamination with food or other types of residues make plastics hard to recycle.

Measures that promote the market introduction of bioplastics should include:

- Recognising and promoting the properties bio-based, biodegradability and compostability, where applicable, in upcoming product design requirements under the Ecodesign Directive.
- Implementing Green Public Procurement legislation including criteria regarding the bio-based content of a product. Furthermore, waste management options such as organic recycling should be taken into account with regard to relevant product categories.
- Continuing the development of standards for bio-based products and implementation of standards available. The European Committee for Standardization Technical Committee 411 developed standards for bio-based products, which are not fully implemented yet



10 facts about the bioplastics industry



1. Bioplastics are plastics that are bio-based, biodegradable/compostable, or both.



2. Bio-based plastics are an innovative industry with a dynamic growth rate and an immense environmental, social and economic potential. With the right framework conditions in place, bio-based plastics produced in the EU could grow to more than 5 million tonnes per year (approximately 10% of plastics production in the EU), which would translate to 160,000 jobs.



3. Bio-based plastics can contribute towards the EU 2020 emissions reduction targets and beyond. Especially when taking into account that by 2030 20% of the global oil production is estimated to be used for plastics production.



4. Bio-based plastics are made from various bio-based feedstock such as sugar beet, corn or cellulose.



5. The growing of feedstock for bio-based plastics' global annual production relies on only 0.01 of the global agricultural area.



6. The major share of bio-based plastics produced is suitable for existing mechanical recycling streams (PE / PET).



7. Some bio-based plastics are also compostable i.e. industrial compostable in corresponding facilities.



8. Compostable plastic bags help to collect more biowaste, diverting it from other waste streams such as landfill and incineration.



9. Compostable plastics can contribute to stronger secondary raw material markets (compost) with a focus on organic recycling. About 100 million tonnes of biowaste are not collected. Compostable plastics can help to collect this unused potential and thereby creating 20.000 jobs in the waste management sector.



10. CEN has developed a range of standards defining bio-based products such as bio-based plastics (e.g. EN 16137 bio-based content testing) and compostability of plastics (e.g. EN 13432 industrial composting). Corresponding certifications ensure that products deliver what they promise.

About European Bioplastics

European Bioplastics represents the interests of around 70 member companies throughout the European Union. With members from the entire value chain, European Bioplastics serves as both a contact platform and catalyst for advancing the objectives of the growing bioplastics industry. For further information, please visit <http://european-bioplastics.org>.