STARCHEUROPE
PLANT-BASED SOLUTIONS

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STARCH EUROPE POSITION ON SINGLE USE PLASTICS

Starch Europe welcomes the European Commission's evaluation of Directive (EU) 2019/904 on the reduction of the impact of certain plastic products on the environment (SUPD). This exercise provides an opportunity to assess the Directive in light of implementation experience and developments in related EU legislation.

In this context, implementation across Member States, together with developments such as the REACH microplastics restriction and the Packaging and Packaging Waste Regulation (PPWR), has highlighted structural inconsistencies in the current framework, particularly regarding the structure-based definition of "plastic" and its implications for certain bio-based materials.

KEY MESSAGES

- The SUPD definition of "plastic" is primarily structure-based and does not sufficiently account for environmental persistence or biodegradability.
- As a result, renewable and biodegradable materials, including certain starch-based coatings, may be treated identically to persistent fossil-based plastics.
- Implementation experience shows diverging interpretation across Member States, creating legal uncertainty and fragmentation in the Single Market.
- In addition, coherence issues have emerged with other EU frameworks, including the REACH microplastics restriction and the Packaging and Packaging Waste Regulation (PPWR).
- The evaluation of the SUPD provides an opportunity to clarify and refine the definition, improving proportionality and regulatory coherence while maintaining environmental ambition.

1. LIMITATIONS OF THE CURRENT STRUCTURE-BASED DEFINITION OF PLASTIC

Within Article 3 [1], the SUPD relies on a structure-based definition of plastic, referring to polymers as defined under REACH and capable of functioning as a main structural component of final products. While this approach provides legal simplicity, it does not account for environmental persistence, biodegradability or functional role within composite products such as fibre-based applications with thin coatings.

In practice, this has led to divergent interpretations across Member States, particularly regarding polymer-modified materials and coatings. Operators face legal uncertainty when determining whether specific products fall within scope, creating compliance complexity and fragmentation within the Single Market.

More fundamentally, the current definition does not sufficiently distinguish between materials with significantly different environmental profiles. Renewable and biodegradable alternatives may be treated identically to persistent fossil-based plastics, despite differing behaviour at end of life. This raises questions of proportionality and environmental coherence.

Modified starches are natural polymers that may undergo limited chemical modification to improve functional performance. Such modifications often involve partial substitution or controlled depolymerisation and do not transform the material into a synthetic fossil-based polymer. In many cases, these materials retain biodegradability and water sensitivity.

1. "'Plastic' means a material consisting of a polymer as defined in point (5) of Article 3 of Regulation (EC) No 1907/20063, to which additives or other substances may have been added, and which can function as a main structural component of final products, with the exception of natural polymers that have not been chemically modified".

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From a green chemistry and bio-based innovation perspective:

- Modified starches are renewable in origin;
- They are designed to degrade under appropriate environmental conditions ;
- They are often used in minimal quantities, for example as coatings in fibre-based applications;
- They support substitution away from fossil-based polymers.

Treating such materials as plastic solely because of chemical modification disregards their renewable origin and environmental performance profile and risks discouraging the development of bio-based alternatives. In the broader EU policy context, where efforts are underway to restrict persistent substances such as PFAS and promote safer materials, this could unintentionally hinder the uptake of renewable barrier solutions.

2. REGULATORY COHERENCE AND ALIGNMENT IN MEMBER STATES

Since 2023, coherence concerns have become more pronounced.

Under the REACH Regulation, microplastics restriction, exemptions may apply where strict biodegradability criteria are met, reflecting a performance-based regulatory approach. By contrast, the SUPD applies a structure-based definition that does not take environmental persistence into account. This divergence may result in inconsistent treatment of materials across EU legislation and creates legal uncertainty for economic operators.

In addition, implementation experience indicates that the interpretation of the plastic definition has diverged across Member States. In some cases, greater emphasis is placed on the chemical modification of polymers rather than on the “main structural component” criterion set out in the SUPD . This may broaden the scope of what is considered plastic, creating legal uncertainty for operators and potential distortions in the Single Market.

Finally, the interaction between SUPD and the PPWR has introduced overlapping requirements relating to design, recyclability, marking and extended producer responsibility. Differences in scope, timelines and definitions increase compliance complexity and administrative burden.

Greater alignment between these instruments would enhance legal clarity and ensure that environmental objectives are pursued in a consistent and proportionate manner.

3. COMPETITIVENESS AND INNOVATION

Implementation experience also shows that disproportionate verification thresholds and reporting obligations in certain Member States have created significant burdens, particularly for SMEs. Divergent national approaches increase compliance costs and may distort competition within the Single Market.

Moreover, regulatory uncertainty surrounding material classification may discourage investment in renewable and innovative alternatives. Where materials with distinct environmental profiles are treated identically, incentives for research and development in lower-impact solutions may be weakened.

A more harmonised and proportionate framework would better safeguard competitiveness while maintaining environmental ambition.

CONCLUSION AND WAY FORWARD

Starch Europe supports the environmental objectives of the SUPD and the transition towards a circular economy.

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However, implementation experience since 2019 demonstrates that the current structure-based definition of plastic does not sufficiently reflect environmental persistence, biodegradability or the functional role of materials in composite products.

In particular, situations may arise where a biodegradable fibre-based product combined with a biodegradable starch-based coating is classified as a plastic product solely due to the chemical modification of the starch. This outcome raises concerns regarding proportionality and regulatory coherence.

STARCH EUROPE THEREFORE CALLS FOR A REVISION OF THE DEFINITION OF "PLASTIC" IN ARTICLE 3(1) OF THE SUPD TO ENSURE THAT ENVIRONMENTAL PERSISTENCE, BIODEGRADABILITY AND FUNCTIONAL ROLE ARE APPROPRIATELY CONSIDERED.

Such a revision should:

- Introduce clearer differentiation between persistent fossil-based plastics and renewable, biodegradable materials;
- Clarify the application of the "main structural component" criterion, particularly for coatings and functional additives used in fibre-based products;
- Ensure alignment with performance-based approaches already recognised under other EU legislation including the REACH microplastics restriction;
- Improve legal certainty and harmonised implementation across Member States.

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