Keeping the EU competitive and sustainable with enzymes

In order to support the ambitious objectives of the European Green Deal and to address the complex social, sustainability, and economic and competitiveness challenges of a just and fair transition, European industry needs a legislative and regulatory environment that promotes access to, and innovation in, safe and sustainable enzyme solutions.

Enzymes are proteins that speed up biochemical reactions essential for life, functioning as natural catalysts. They work under mild conditions, offering sustainable solutions for both nature and industry. Understanding their role is crucial for policymaking, especially in food, environmental, and technological contexts.

At a crucial juncture, the European Union (EU) must balance strategic ambitions to retain global competitiveness amid impending leadership changes. The enzymes industry, integral to advancing these ambitions, must feature prominently in future policies aiming to position the EU as a global leader.

Enzymes play a vital role in the Green Transition by modernising European industries for economic growth, job creation, and sustainable development while mitigating climate change. Enzymes from natural sources are in industrial use for over a century, while the application of enzymes produced by precision fermentation started more than 30 years ago. They enhance sustainability and competitiveness across various sectors like food processing, animal nutrition, detergents, and textiles, improving efficiency, reducing waste and harmful chemicals, and conserving energy and water.

With a long history of safe use and no reported consumer allergies in over 50 years, enzymes are essential for meeting environmental goals without compromising safety, aligning with key EU policies such as the Bioeconomy Strategy and Circular Economy Action Plan.

The enzymes industry drives continuous innovation, investing in research and development to deliver sustainable solutions for evolving industry and consumer needs. Recent innovations include applications in biodegrading plastics, carbon capture and storage, and biomaterial production.

Projected increased R&D investments in enzymes over the next decade will address future challenges and contribute to the EU’s sustainability, resilience, and competitiveness objectives. Recognizing the importance of innovation, the enzymes industry remains dedicated to providing safe and sustainable solutions for EU industries and consumers.
POLICY RECOMMENDATIONS
HAZARD-BASED REGULATORY TOOLS

Challenge:
Enzymes are classified as Cat. 1 respiratory sensitisers. Due to this inherent hazard property, enzymes are impacted by any hazard-based regulatory tools aiming at restricting the use of respiratory sensitisers without duly considering their sustainability benefits, actual risk and the measures taken to minimise it. This is proven by more than 50 years history of safe use.

AMFEP asks:
- Exempt enzymes from the scope of the extended generic approach to risk management (GRA) in the upcoming REACH revision.
- Exempt enzymes from any potential restrictions of respiratory sensitisers in industrial and product policies (Green Claims Directive, Ecodesign for Sustainable Products Regulation (ESPR), Safe and Sustainable by Design (SSbD) criteria, Detergents Regulation)
- Recognise the substantial contribution of enzymes to the ‘pollution prevention and control’, ‘transition to a circular economy’ and ‘climate change mitigation’ goals of the EU Taxonomy

INNOVATION AND COMPETITIVENESS

Challenge:
In order to meet the EU’s ambitions in sustainability, resilience, and competitiveness, there is a need for the EU policy framework to actively foster a regulatory environment that encourages and supports innovation. One-size-fits-all policies are not in adequacy with innovation.

AMFEP asks:
- Promote and encourage innovation in enzymes, through long-term regulatory certainty that provides a framework to continue investing in enzymes
- Develop science-based policies striking a balance between safety and innovation, taking into account the specificities and uniqueness of enzymes

MARKET ACCESS FOR FOOD ENZYME PRODUCTS

Challenge:
Only the enzymes listed in the upcoming Union List of Food Enzymes will be authorised to be placed on the EU market and used in the manufacturing of food products. The risk assessment process is in place, following guidance developed by EFSA. The next phase consists in translating the EFSA opinions to an EU positive list of approved enzymes. This risk management phase is currently being discussed, and since many food enzymes are already on the EU market, provision should be made to ensure that the switchover to the EU list of food enzymes takes place smoothly, does not disturb the existing food enzyme market, while allowing for innovation.

AMFEP asks:
- Deliver a proportionate risk assessment and swift access to market through a consistent and predictable process for food enzymes
- Enter a constructive dialogue with the Commission and Member States, recognising the industry technical knowledge and insight, to collectively contribute to the success of the Union List

Conclusion
AMFEP is calling policymakers to address the aforementioned issues during their next mandate. AMFEP stands ready to engage in dialogue and collaboration to ensure that enzymes are fully recognised for their significant contribution to many of the EU’s policy objectives.