EUROPEAN COMMISSION CALL FOR EVIDENCE ON THE BIO-ECONOMY STRATEGY

A.I.S.E. Position

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Introduction

A.I.S.E., representing the cleaning and maintenance products industry, welcomes the European Commission's initiative to revise the EU Bioeconomy Strategy and appreciates the opportunity to contribute to the Call for Evidence *"Towards a Circular, Regenerative and Competitive Bioeconomy".*

This renewed Strategy comes at a crucial time and should translate into immediate actions and tangible results to accelerate its green and circular transitions while unlocking the full potential of European industrial competitiveness and innovation.

A.I.S.E. and its members are committed to supporting the EU's ambition to accelerate the transition to a sustainable, circular and competitive bioeconomy. Our sector has long placed sustainability at the heart of its practices. Through initiatives such as the Charter for Sustainable Cleaning, A.I.S.E. has led efforts to promote resource efficiency and advance innovation.

Grounded in scientific evidence, the new EU bioeconomy strategy should be aligned with industrial realities, coherent with the broader EU competitiveness agenda, and provide adequate funding in line with its ambitions.

Building on A.I.S.E. *Guiding Principles on Sustainable Sourcing of Bio-based Materials*, this position paper outlines the opportunities, challenges, and priorities for our sector in the context of the upcoming Strategy.

The new Bioeconomy Strategy: opportunities for the detergents sector

Bio-based and bio-sourced materials have long been part of the supply chains and innovation strategy of detergents manufacturers. They are playing an increasingly strategic role in the manufacturing of detergents, offering a pathway to reduce environmental impact while enhancing innovation, industrial competitiveness and resilience in Europe. These materials support the shift toward renewable and recycled carbon content in formulations, enabling our sector to meet the EU's climate ambitions, and support Europe's transition to a more circular and regenerative economy.

Enhancing the use of bio-based materials will support reaching the EU's climate targets. The integration of these materials is even paramount for the detergents sector to reach net zero emissions and maximise emission reduction[1].

Innovation is a key enabler of sustainable transformation, in particular when it comes to the use of bio-derived materials. The use of bio-based ingredients is not new to the detergents and maintenance products sector, and we are very familiar with the opportunities and challenges it offers.

A.I.S.E. members have already taken concrete steps to integrate innovative and sustainable sourcing practises, as can be demonstrated for example through:

- Responsible sourcing of palm and palm kernel oil derivatives, which play a fundamental role in detergent and cleaning formulations e.g. **Roundtable on Sustainable Palm Oil (RSPO).**
- Extensive use of **enzymes** in cleaning products to enable effective cleaning at low temperatures, reducing energy consumption and improving overall environmental performance. These enzymes, produced via white biotechnology, are biodegradable and derived from renewable feedstocks. This not only enhances product functionality but also supports the goals of the European Green Deal.
- Use of **biomass balancing (BMB) methods** that allows manufacturers to integrate renewable or recycled feedstocks into existing processes without infrastructure overhaul, while increasing circularity and renewable content in the supply chain.
- More recently, **progress in biotechnology** offers strong potential for the development and uptake of bio-surfactants, with a strong European leadership. For instance, using the latest advances in biotechnology, we can mirror a process that happens in nature, transforming sugars into surfactants, but at a much bigger scale.

The detergents and cleaning sector continues to innovate and invest in new solutions. A.I.S.E. members are currently exploring new bio-based and circular alternatives to traditional fossil-based ingredients, derived from various biomass sources but also enabled by rapid biotechnology improvements. Reflecting our sector's ongoing commitment to improving sustainable outcomes.

Enabling the transition: Challenges to address

Despite the pivotal role of bio-based or biotechnology-derived materials for a climate neutral and circular economy, their use does not automatically lead to a better environmental performance. Therefore, it is essential to consider the **full life cycle of materials**. Additionally, while the ambition to increase the use of bio-based and circular materials is welcome, the new Strategy must also reflect industrial realities and constraints that our sector is facing, such as:

- **Feedstock availability and costs**: Availability of sustainable biomass remains limited and concentrated in certain regions, making sourcing more complex and uneven across

[1] At the end of life, detergent products biodegrade, and therefore the carbon molecules contained in the product are released into the environment. When these carbon, molecules are coming from petrochemical-derived ingredients, this creates new carbon emissions into the atmosphere. Depending on the product, these 'end-of-life GHG emissions can dominate the lifecycle emissions of some detergents. For some surfactants, more than 50% of their GHG footprint comes from their (bio) degradation at the end of life.

the Single Market[2]. Prices of certified bio-based raw materials—such as those verified under RSPO, Roundtable on Sustainable Biomaterials (RSB), International Sustainability and Carbon Certification (ISCC) and similar scheme—are significantly more volatile and can be significantly higher than non-certified or fossil-based counterparts[3]. Furthermore, biomass is currently being heavily diverted to biofuel and bioenergy markets, under the impulsion of the Renewable Energy Directive III (RED III) and more recently to sustainable aviation fuels, via new incorporation mandates. This limits availability in other sectors and applications, such as chemicals and materials, leading to price rises. This adds **cost pressure** on manufacturers and complicates long-term planning, particularly in high-volume product categories.

- **Functional and technical limitations:** our formulations have to meet strict criteria, in relation to cleaning performance and consumer safety. Bio-based alternatives may not always meet these requirements without rethinking the entire formulation. Therefore, further innovation and investment are needed for the development and use of bio-based alternatives in detergents, requiring long-term investment and regulatory certainty.
- **Disproportionate burdens on SMEs**: small and medium-sized enterprises, which represent a large share of our industry, often operate with fewer resources and lower flexibility, making them more vulnerable to sharp input cost increases or abrupt regulatory shifts.
- **Sector specific flexibility:** the transition toward sustainable sourcing of bio-based materials must be gradual and adapted to the availability of appropriate supply chains and certification schemes.
- **Varying levels of technological readiness**: when it comes to bio-based or biotechnology-derived ingredients for detergents, we are faced with very varied levels of technological readiness. The Strategy must take this into account and look not only at what can be done today but also the potential of technologies through proper support and funding.

Ensuring a meaningful Bioeconomy Strategy for the detergent sector

To realise the full potential of bioeconomy in the cleaning and detergents sector, A.I.S.E. calls the European Commission to ensure that the new Strategy:

- **Includes clear and meaningful support** for innovation and investments in the bioeconomy, not only for research and development but also demonstration and scale-up projects. The strategy should envisage incentives and derisking measures for investments in innovative technologies. It should incentivise private and public-private partnerships and consortia that can develop and scale up innovative technologies or can establish local bioeconomy models built around the specific features of local ecosystems. The EC should increase its support to the successful Circular Biobased Economy Joint Undertaking (CBE JU), an established and effective public-private partnership, but with a new emphasis on

[2] A.I.S.E. (2019), *Guiding Principles on Sustainable Sourcing of Bio-based Materials*. See also Cefic (2023), *Towards a thriving EU bioeconomy: Enhancing competitiveness and sustainability*, https://cefic.org/policy-matters/cefic-position-on-the-eu-bioeconomy-strategy/

[3] https://rspo.org/

funding translation research and development at higher technology readiness level (TRL 6+).

- **Importance of robust methodologies:** the **life-cycle assessment** (LCA) is important to ensure that all environmental impacts are fully accounted for. LCA should serve as a foundational tool to evaluate impacts and potential trade-offs across land and water use, biodiversity, greenhouse gas and other emissions, from the sourcing phase up to product end-of-life, especially when large-scale substitution of conventional materials is under consideration. In line with A.I.S.E.'s Guiding Principles on Sustainable Sourcing, bio-based materials must be renewable and traceable, sourced in ways that respect environmental thresholds, assessed (as for other future technologies) against multiple LCA impact categories (e.g. climate change, land use change, depletion of fossil materials…) and uphold social standards.
- **Secure biomass supply:** the Strategy should boost the development of sustainable, affordable and reliable feedstocks within the EU Single Market and access to biomass from neighbouring nation states, to mitigate the unavoidable reliance on intercontinental biomass flow. This will be essential to avoid fragmentation and ensure that all European companies have fair and reliable access to bio-based materials. In this regard, ensuring a level playing field between sectors will be paramount to fix the current market imbalances created by existing bioenergy and biofuel policies.
- **Ensure regulatory clarity:** that allows new solutions to reach fair market conditions across all industries, while avoiding new administrative burdens.
- **Policy coherence:** the new Strategy must not be developed in isolation. It must align with the broader strategic direction of the EU and integrate with the initiatives that define Europe's industrial and regulatory future. In particular, the Strategy should reflect and support the objectives of the recent adopted **Clean Industrial Deal**, the **Competitiveness Compass** and the **Omnibus package for Simplification.**
- **Maintain technology neutrality across different sources:** the strategy should help bringing bio-based solutions to market. In addition, the EU should also reflect on the benefits that can be brought by recycled and carbon captured feedstocks and which policy framework would best support their deployment, provided that they achieve the same outcomes in terms of reducing GHG emissions and, based on LCA analysis, do not generate adverse impacts.
- **Balanced and phased policy approach for SMEs**: that supports industry through innovation funding, transitional flexibility, and access to scalable, affordable solutions.

Fostering innovation and scale up: the revised Strategy must be designed to support practical implementation across industries of different scales and capacities, while fostering innovation and sustainability through evidence-based policy frameworks.

Conclusion

A.I.S.E. reaffirms its commitment to contributing to a sustainable and competitive European bioeconomy. The detergents and maintenance products industry are already engaged in responsible sourcing and innovation and stands ready to further contribute to the objectives of the revised Strategy.

A.I.S.E. encourages the European Commission to consider the specific characteristics of downstream sectors, and to promote a science-based, coherent, and innovation-friendly framework that enables continued progress while safeguarding environmental and economic

sustainability. We look forward to contributing further to the discussion and to working constructively with EU institutions in the next stages of this process.

About A.I.S.E. - A.I.S.E. represents the detergents and maintenance products industry in Europe. Based in Brussels, A.I.S.E. has been the voice of the industry to EU regulators since 1952. Membership consists of 30 national associations across Europe, 20 corporate members and 19 value chain partners. Through this extensive network, A.I.S.E. represents over 900 companies supplying household and professional cleaning products and services across Europe. Committed to promoting sustainable practices and innovation, A.I.S.E. collaborates closely with European institutions, industry stakeholders, and the public to enhance the sector's environmental protection, consumer safety, and regulatory compliance efforts.

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