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EuropaBio position paper for the proposal on establishing a framework of measures for strengthening Europe's net-zero technology products manufacturing ecosystem (Net-Zero Industry Act)

EuropaBio welcomes the Net-Zero Industry Act (NZIA). This initiative is an extremely important step to preserve Europe's competitiveness. Building on this first step of the Green Deal Industrial Plan, EuropaBio is calling for the inclusion of biotechnology in the NZIA text or in the Annex. EuropaBio is also calling for a new initiative to be created to complement the Net-Zero Industry Act, focusing on industrial and manufacturing processes and prioritising the development and scale-up of industrial biotechnology and biomanufacturing as a matter of strategic importance for Europe to reach its net-zero ambitions.

The NZIA recognizes the importance of the energy sector in the green transition and the need to develop greener energy pathways to reduce greenhouse gases. However, it does not consider incentivising the use of alternative technologies such as industrial biotechnology and biomanufacturing.

Industrial biotechnology and biomanufacturing are substantial contributors to net-zero, for example, by replacing a non-renewable resource by a bio-based resource and/or by using techniques such as fermentation which are less energy-intensive than conventional processes. An example is the production of vitamin B2, which reduces the use of fossil raw materials by 70% and wastewater by 65%, while reducing production costs by 40%[1]. Other examples include the use of enzymes to replace chlorine in paper bleaching which reduces energy needs by 40% or in detergents to allow the use of lower temperatures during laundry and consequently a reduction of electricity use by 30%[2].

Furthermore, the NZIA should integrate the bioeconomy more strongly in its provisions. The recent Council Conclusions on the opportunities of the bioeconomy of April 2023, which highlighted the need to integrate bioeconomy across EU policies, are supportive of this[3].

Both economic partners and competitors have already recognized the importance of biotechnology and biomanufacturing, which according to estimates recently quoted by the US administration is projected to grow into a $30 trillion sector globally by 2030[4]. The United States have adopted the

[1] https://www.europabio.org/timeline/2000/
[2] Life Cycle Assessment Supports Cold-Wash Enzymes, International Journal for Applied Science, 2005.
[3] https://data.consilium.europa.eu/doc/document/ST-8194-2023-INIT/en/pdf
[4] https://www.bcg.com/publications/2022/synthetic-biology-is-about-to-disrupt-your-industry ; https://www.youtube.com/watch?v=LcP9zPNuUh4

White House Executive Order on Advancing Biotechnology and Biomanufacturing Innovation[5] to maintain technological leadership and economic competitiveness. China has made the development of the bioeconomy and of its biotechnology sector central to its 5-year growth plans[6], while India aims to be recognized as a Global Biomanufacturing Hub by 2025 and expects the sector to be worth $150 billion by then[7]. Japan also aims to advance its biotechnology sector, with a dedicated strategy that plans to grow it to a size of $837 billion by 2030[8].

Industrial biotechnology and biomanufacturing are of high strategic importance to reach the EU's net-zero ambitions, while also ensuring its strategic autonomy in key technologies and value chains. The EU must urgently prioritize their development and scale-up if it does not want to be left behind and reliant on technology and infrastructure from other parts of the world. EuropaBio stands ready to contribute to shaping policies and legislation in this direction.

EuropaBio supports the introduction of bio-based technologies under the scope of the proposal, along with the proposed compromise text by the Swedish Presidency (21/06/23), which also includes a new mention of biotech solutions in the NZIA.

About EuropaBio

EuropaBio, the European Association for Bioindustries, promotes an innovative and dynamic European biotechnology industry. EuropaBio and its members are committed to the socially responsible use of biotechnology to improve quality of life; to prevent, diagnose, treat, and cure diseases; to improve the quality and quantity of food and feedstuffs and to move towards a biobased and zero-waste economy. EuropaBio represents corporate and associate members, plus national biotechnology associations and bioregions.

Read more about our work at www.europabio.org.

[5] https://www.whitehouse.gov/briefing-room/presidential-actions/2022/09/12/executive-order-on-advancing-biotechnology-and-biomanufacturing-innovation-for-a-sustainable-safe-and-secure-american-bioeconomy/
[6] https://english.www.gov.cn/policies/policywatch/202205/11/content_WS627b169ec6d02e533532a879.html
[7] https://dbtindia.gov.in/sites/default/files/NATIONAL%20BIOTECHNOLOGY%20DEVELOPMENT%20STRATEGY_01.04.pdf
[8] https://www.trade.gov/market-intelligence/japan-bioeconomy-strategy