



Regulatory Momentum for Bio-Based Plastics: Navigating the EU Policy Landscape

Enora Oger – Corporate Communication & Public Affairs Assistant

**Warning Signs for German Chemicals Sector:
'Further Decline in 2025'**

29 DEC 2023 | 12:14 UTC

**No recovery in sight in 2024 for Europe's
crisis-ridden chemical industry**

**EU chemical production faces
significant decline**

25 July 2023

**Europe's petrochemical industry is
heading for death row**

REPORTS & MULTIMEDIA / EXPLAINER

**The Hidden Costs of
Fossil Fuels**

NEWS ARTICLE |

**UN Climate Change Conference: World
agrees to transition away from fossil fuels**

**Defossilizing the chemical industry
is no longer optional:
It's the key to EU environmental
survival and industrial sovereignty.**





2015: Paris Agreement targeted 1.5°C as the global warming limit

2025: Scientists warn it's already too late

**WE NEED TO ACT FASTER &
STRONGER!**

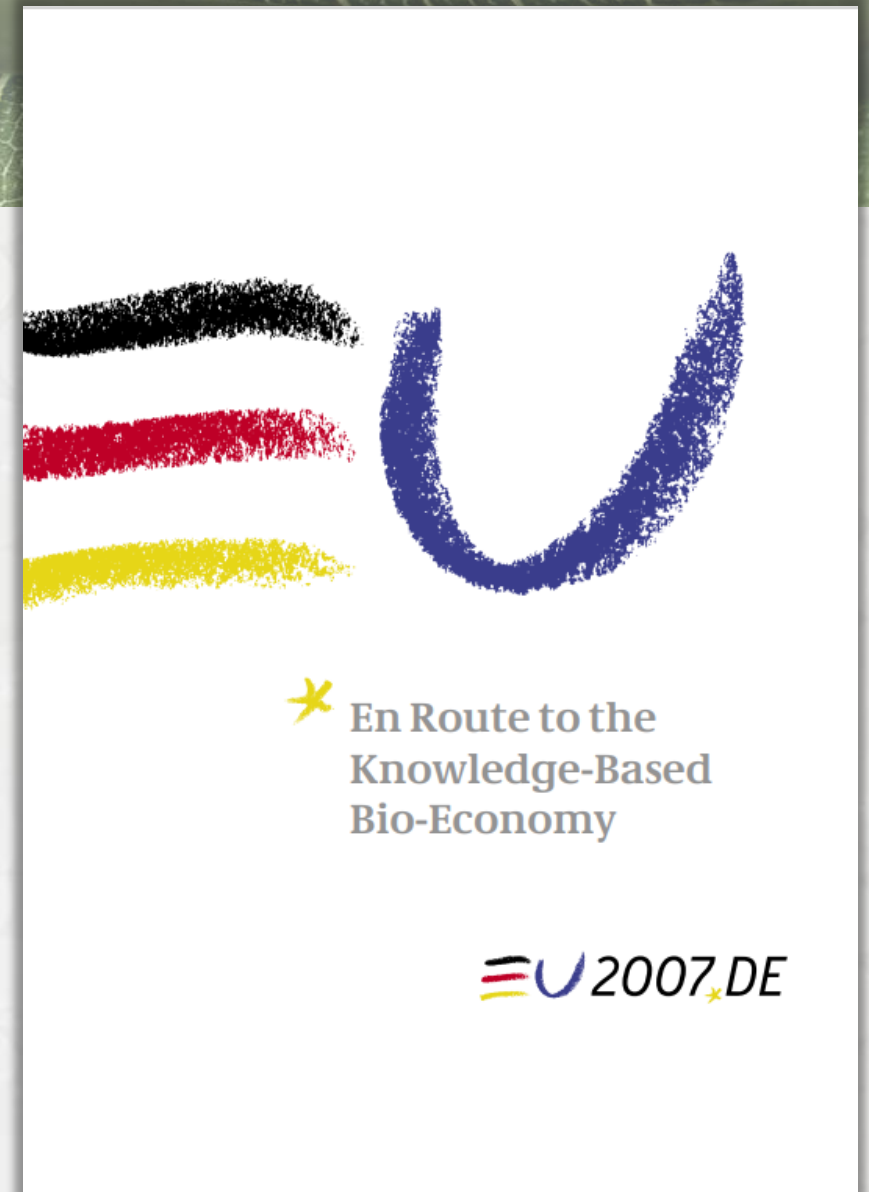
Source: Indicators of Global Climate Change report, Earth System Science Data, 2025

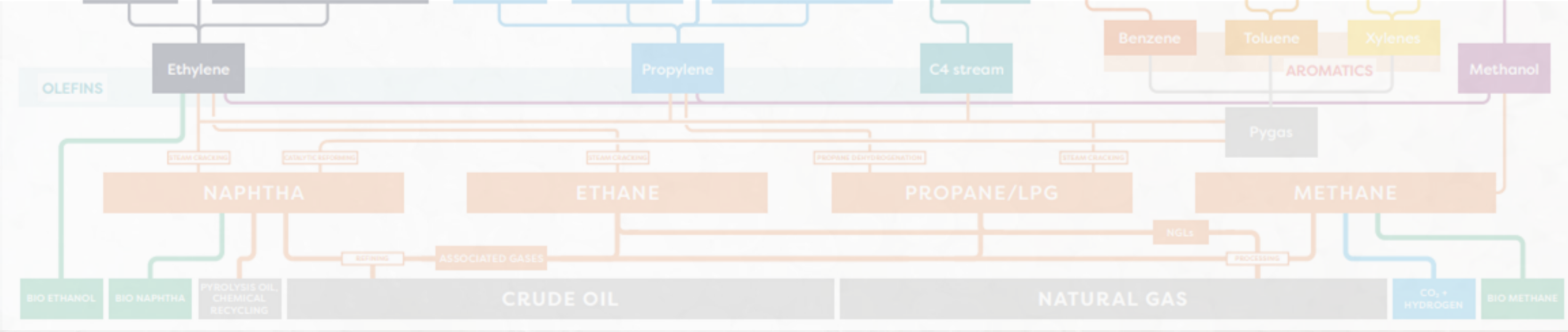
Futero - Confidential



The concept of Bioeconomy was discussed
almost 20 years ago at EU level, with the
'Cologne Paper' of 2007

THE #1 PRIORITY IS TO STOP THE USE OF FOSSIL CARBON





OVER 90% OF CHEMISTRY IS STILL FOSSIL-BASED

Wood and paper alone cannot drive the green revolution in materials

We need urgently to implement industrial fermentation



PHASE OUT VIRGIN FOSSIL CARBON



RECYCLING



BIO-BASED



CCU

FUTERRO: A LEADER IN BIO-BASED CHEMISTRY & MATERIALS



Futerra is a global pioneer and leader in the **development and production of lactic acid** – a key building block, **and PLA** – a biobased, recyclable and industrially compostable plastic.

More than
30
years of experience

More than
300
patents

Current production of
200
ktpa of Lactic Acid

Current production of
100
ktpa of Polylactic Acid



ABOUT FUTERRO

Futerro is planning to become the first European PLA producer by implementing in France by 2028 **Europe's first fully-integrated and circular biorefinery.**

The biorefinery will include both **chemical and mechanical recycling capacities** of PLA-based waste.



500 M€

Investment

250 FTE

Direct

900 FTE

Indirect

26,5 ha

Site

75,000 t/y

Polylactic Acid

7,000 t/y

Recycling capacity

EU SUPPORTING INITIATIVES

COM2024(137)

- **Critical Technology:** Biotechnology is recognized as a **critical technology for economic security**.
- **Alternative Feedstocks:** The Commission considers **alternative feedstocks as a solution** for emission reduction, resource efficiency, and strategic autonomy.
- **Impact Assessment:** Commission is conducting an impact assessment to evaluate the feasibility of **bio-based content requirements in specific product categories**.

Positive Trend



PPWR

Article 8

Based on a future review (by 3 years after the entry in force of PPWR), the Commission shall:

- Lay down **sustainability requirements for bio-based feedstock** in packaging.
- Lay down **targets to increase the use of bio-based feedstock** in packaging.

- Introduce the possibility of using **bio-based feedstock instead of recycled content** in case recycling technologies are not available.

Article 9

- Within three years of the PPWR coming into force, **certain packaging, such as coffee bags, must be industrially compostable**. The Commission may add other types of packaging to this list if deemed relevant.

Legally Binding

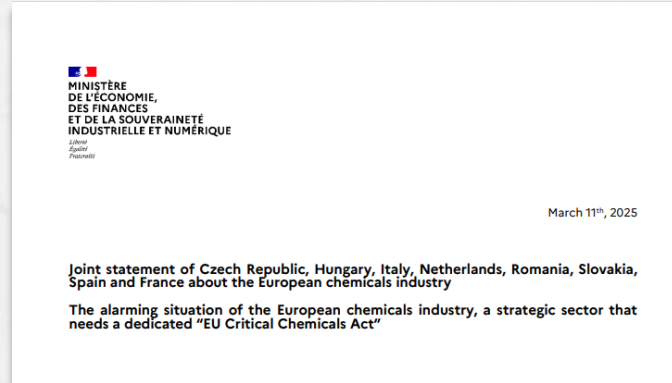


EU SUPPORTING INITIATIVES

COM(2025) 85 final – Clean Industrial Deal

- “To move away from fossil materials, it is vital to mandate the use of new raw material sources like recycled and **bio-based materials to substitute, for example, virgin fossil materials in plastics.**”
- “Tap the **significant growth potential of bio-based materials** substituting fossil-based materials”

Positive Trend



Joint Statement about the European chemicals industry

Czech Republic, Hungary, Italy, Netherlands, Romania, Slovakia, Spain and France

- Calls for a **Critical Chemicals Act** to foster decarbonization, modernization and resilience of the chemical industry
- “**Bioeconomy** and circularity should be taken into account by European Policies alongside decarbonization.”
- “it will be also **strategic to invest in industrial transformation** by developing sustainable production platforms and advanced complementary technologies. These include biofuels, **plastic recycling, bioplastics...**”
- Lists alternative **bio-based molecules** that could replace fossil-based ones, citing notably **lactic acid**.

Positive Trend

CHRONOLOGICAL REVIEW

THE MOMENTUM IS RIGHT NOW

EU Bioeconomy Strategy

Recognized needed shift to bio-based resources, innovation for sustainable growth, and promoted public-private partnerships (e.g., BBI-JU, CBE-JU).

EU Bioeconomy Strategy Update #1

Strategy accompanied by an Action Plan

Taxonomy – Climate Delegated Act

Bio-based plastics eligible for “green” classification under climate mitigation criteria

PPWR

First regulation mentioning bio-based plastics in product-specific legislation – creating potential opportunities

Clean Industrial Deal

Communication on strategic view of the new Commission for the Industry
“it is vital to mandate the use of new raw material sources like recycled and bio-based materials to substitute, for example, virgin fossil materials in plastics”

European Chemicals Industry Action Plan

Biomass considered an alternative clean carbon source, COM will explore further options to incentivise the use of sustainable biomass as feedstock.

Bioeconomy Strategy Update #2

Planned Q4 2025
Communication with an action plan
Summary report of the consultation now published



EU action plan for the Circular Economy

54 actions including Strategy on plastics in the circular economy (2018), biomass cascading use guidance (2018), bio-based R&I via Horizon 2020, RED II/III, 2018 Bioeconomy Strategy review.

EU Green Deal

Package of policy initiatives, which set the EU on the path to a green transition, with the ultimate goal of reaching climate neutrality by 2050.

Policy Framework on Biobased, Biodegradable & Compostable Plastics

Communication clarifying definitions, design and labelling requirements

Boosting Biotechnology and Biomanufacturing in the EU

Biotechnology and alternative feedstocks recognized as key to EU economic security and emissions goals, with bio-based product rules under assessment.

Biotech Act

Consultation open until 10th of November

EU Circular Economy Act

Planned Q4-2026
Consultation open until 6th of November

ELVR

Product specific legislation on automobiles





WHAT SHOULD THE INDUSTRY DO?

The Commission is in listening mode – we need to be active!

- Communicate the value of our products clearly and transparently
- Actively participate in stakeholder dialogues to shape the future of bio-based plastics.
- Respond to public consultations to ensure our voice is heard in EU policymaking.



THANK YOU

info@futerro.com | www.futerro.com