

POLICY BRIEF 3

Bio-based fertilisers as a piece of the puzzle in the transition towards more sustainable food systems

Key challenges

- Sustainable farming requires the integration of diverse agricultural practices.
- Profitable business models are essential to support sustainable farming systems.
- Research on BBFs should be conducted through inter- and transdisciplinary collaboration.

CURRENT CONTEXT

Farm to Fork strategy

Europe aims for a comprehensive shift toward sustainability across the entire food chain to minimise environmental impact.

Reducing synthetic fertilisers

Europe's key goal is to reduce synthetic fertiliser use by advancing bio-based alternatives and valorising residual streams.

Untapped potential

EC highlights bio-based fertilisers as a largely untapped resource for enhancing sustainability in European agriculture.

PROBLEMS ENCOUNTERED

Diverse sustainable approaches

Sustainable farming includes various practices like organic, regenerative, and agroecological farming, which must coexist and adapt to different constraints.

Combined fertiliser use

Combining mineral and bio-based fertilisers often enhances soil biodiversity and resilience.

Need for business models

Viable business models are essential to support sustainable investments, considering both environmental and socio-economic diversity across regions.

Interdisciplinary research

Interdisciplinary collaboration is crucial for addressing the broad impacts of sustainability, from agronomic to socio-economic factors.

Stakeholder cooperation

Early cross-sector cooperation is key to developing marketable bio-based fertilisers to maximise product viability and impact.

RECOMMENDATIONS TO POLICY MAKERS



Encourage international recognition and **coexistence of diverse sustainable farming practices**, allowing bio-based and conventional methods to complement each other.



Promote **bio-based fertilisers as a sustainable option** across all farming systems, recognising their contribution to overall agricultural resilience.



Develop **market-aligned policies** that consider the economic realities of the global food system and regional differences in agricultural practices.



Foster **stakeholder dialogue** to ensure that policy goals are realistic, regionally adaptable, and support both sustainability and economic viability.