DeliSoil

Delivering soil improvers from circular food production processes to boost soil health

Practice Abstract 22

Delivering safe and accepted soil fertilisers in Germany: insights from SWOT and PESTLE analysis

Summary

Circular fertiliser solutions in Germany are technically mature and ready for scaling. However, their success depends mainly on external conditions rather than technology. Two stakeholder assessments (industry and academia) converged on the same core enablers: reliable long-term policies, circular economy regulation, and climate policy (e.g. carbon pricing) that reward low-emission, high-quality fertilisers. The strongest shared barriers are high production costs, strict contaminant-risk perception, uncertain long-term feedstock supply, and tough competition from low-priced conventional fertilisers. This creates a "defensive" market situation in which threats currently outweigh opportunities unless the framework conditions improve.

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Germany

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Stakeholders:

Farmers
Consumers
Industry
Researchers
Policymakers

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Practical Recommendations

Different technological pathways face distinct challenges: advanced nutrient recovery can demonstrate strong agronomic value and reduced contamination risk, while broader organic routes may tap into larger feedstock volumes but require greater trust-building efforts. Prioritise systemic actions: secure long-term feedstock contracts and diversify sources.

Strengthen trust through robust quality assurance, traceability, and transparent communication. Build agronomic evidence via demonstrations that enhance farmers' willingness to pay. Engage policymakers and investors to reinforce stable targets, standards, and financing. Ensure regional tailoring, as infrastructure, subsidies, and acceptance vary across federal states.

Needs addressed by the practice

Enabling market uptake of high-quality circular fertilisers by reducing cost and risk barriers, increasing trust, and improving regulatory and investment certainty.

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About DeliSoil

The EU-funded DeliSoil project is a four-year initiative that aims to transform food industry byproducts into safe, sustainable, and tailored soil improvers. This project addresses two pressing challenges: the poor recycling of industrial food processing byproducts and the degradation of soil health.

By harnessing a circular approach, DeliSoil will contribute to improving soil health and productivity, supporting the EU Mission "A Soil Deal for Europe" and the Farm to Fork Strategy, as well as other Circular and Bioeconomy Strategies and Plans.

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