

BIO-BASED FERTILISERS AND NEW POLICIES

RUSTICA - CIRCULAR BIO-BASED FERTILISERS AND NEW POLICIES

SHORT SUMMARY FOR PRACTITIONERS

EN version

RUSTICA transforms redundant leftovers from agriculture into bio-based fertilisers towards optimal plant supply, soil enhancement and circularity of food and nutrition systems. European policies, such as the Farm to Fork Strategy, call for reduction of nutrient losses and draw attention to opportunities by indicating *"the production of bio-based fertilisers as a 'largely untapped potential for farmers and their cooperatives'".* Furthermore, research on new technologies to advance feasibility of innovative circular business models is strongly supported and promoted in the European Union.

By offering a range of Product Function Categories (PFCs) and Component Material Categories (CMCs), as well as replacing its predecessor, the Regulation EC No 2003/2003 mainly dealing with mineral fertilisers, a new EU Fertilising Products Regulation entered into force in 2022. EU-wide rules are offered, e.g., for organic fertilisers representing harmonised options against to national legal counterparts on fertilisers.

Striving for large-scale production of fertilisers from a more local origin, indicating valorisation of side streams, and following the nutrient recycling principles of the EU Circular Economy, the new Regulation reveals a number of opportunities, e.g., for compost and biochar. On the other hand, there are still restrictions for certain feedstocks, inputs and materials on vegetable and animal basis as regards their deployment for nourishment and support of crops.

SHORT SUMMARY FOR PRACTITIONERS

NATIVE version

RUSTICA transforma los residuos sobrantes de la agricultura en fertilizantes de origen biológico para lograr un suministro óptimo de las plantas, la mejora del suelo y la circularidad de los sistemas alimentarios y nutricionales. Las políticas europeas, como la Estrategia de la Granja a la Mesa, exigen la reducción de las pérdidas de nutrientes y llaman la atención sobre las oportunidades indicando que *"la producción de fertilizantes de origen biológico es un potencial en gran medida sin explotar para los agricultores y sus cooperativas"*. Además, la investigación sobre nuevas tecnologías para avanzar en la viabilidad de modelos comerciales circulares innovadores cuenta con un fuerte apoyo y promoción en la Unión Europea. Al ofrecer una gama de categorías de funciones de productos (PFC) y categorías de materiales componentes (CMC), además de reemplazar a su predecesor, el Reglamento CE n.º 2003/2003 que trata principalmente de fertilizantes minerales, en 2022 entró en vigor un nuevo Reglamento de la UE sobre productos fertilizantes. Se ofrecen normas a nivel de la UE, por ejemplo, para fertilizantes orgánicos que representan opciones armonizadas frente a las contrapartes legales nacionales sobre fertilizantes. El nuevo Reglamento, que aspira a una producción a gran escala de fertilizantes de origen más local, que valorice los flujos secundarios y que siga los principios de reciclaje de nutrientes de la economía circular de la UE, revela una serie de oportunidades, por ejemplo, para el compost y el biocarbón. Por otra parte, siguen existiendo restricciones para determinadas materias primas, insumos y materiales de origen vegetal y animal en lo que respecta a su utilización para la alimentación y el apoyo de los cultivos.

Demonstration of circular
bio-based fertilisers and
implementation of optimized
fertiliser strategies and value
chains in rural communities

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CONTEXT

To date, significant political efforts on progress in enabling the development and marketing of circular bio-based fertilisers are made in the EU. Policies and strategies encourage to unfold the potential of innovative bio-based fertiliser systems. A new EU Regulation is established to foster a multitude of circular solutions for production and application of fertilising products, such as compost and biochar, in the EU and beyond.

PROBLEM

Albeit recent legal provisions aim to facilitate the use of secondary resources, vegetable- and animal-based feedstocks still face considerable restrictions. In particular, deliberating harmonised rules on fertilising products, there are still remaining gaps according to smooth valorisation, e.g., of waste and animal by-products into bio-based fertilisers.

APPROACH

RUSTICA comprehensively evaluates the political and legal frameworks, and in particular the EU harmonised rules on circular bio-based fertilisers. Apart from analysing the current obstacles and enablers, an outlook on expected future developments has been elaborated. Results of the work are published and available not only for policy makers and authorities but also further stakeholders, e.g., practitioners and advisors.

OUTCOME

1. A comprehensive outlook (D3.13) and further reports on international, European and national legislative and political aspects, as well as their alterations and trends;
2. A variety of published articles on major criteria in European, national and regional legislation in Europe and beyond relevant for producers, marketers and users of circular bio-based fertilisers;
3. A series of policy briefs addressing specific subjects in the legal and political area and formulating requests to policy makers;
4. A number of events, such as a Global Conference and a Final Project event to share insights and best practices to audiences;

PRACTICAL RECOMMENDATIONS

- ✓ A thorough definition of the value chain from feedstocks over processes to applications;
- ✓ An examination of legal stimuli and barriers by deciding the individual routes to the markets, as well as requirements to recognize further needs;
- ✓ An investigation of policies to identify the avenues of the future for the materials and products envisaged to be marketed and used for the purpose of sustainable provision of nutrients and protection of soils;