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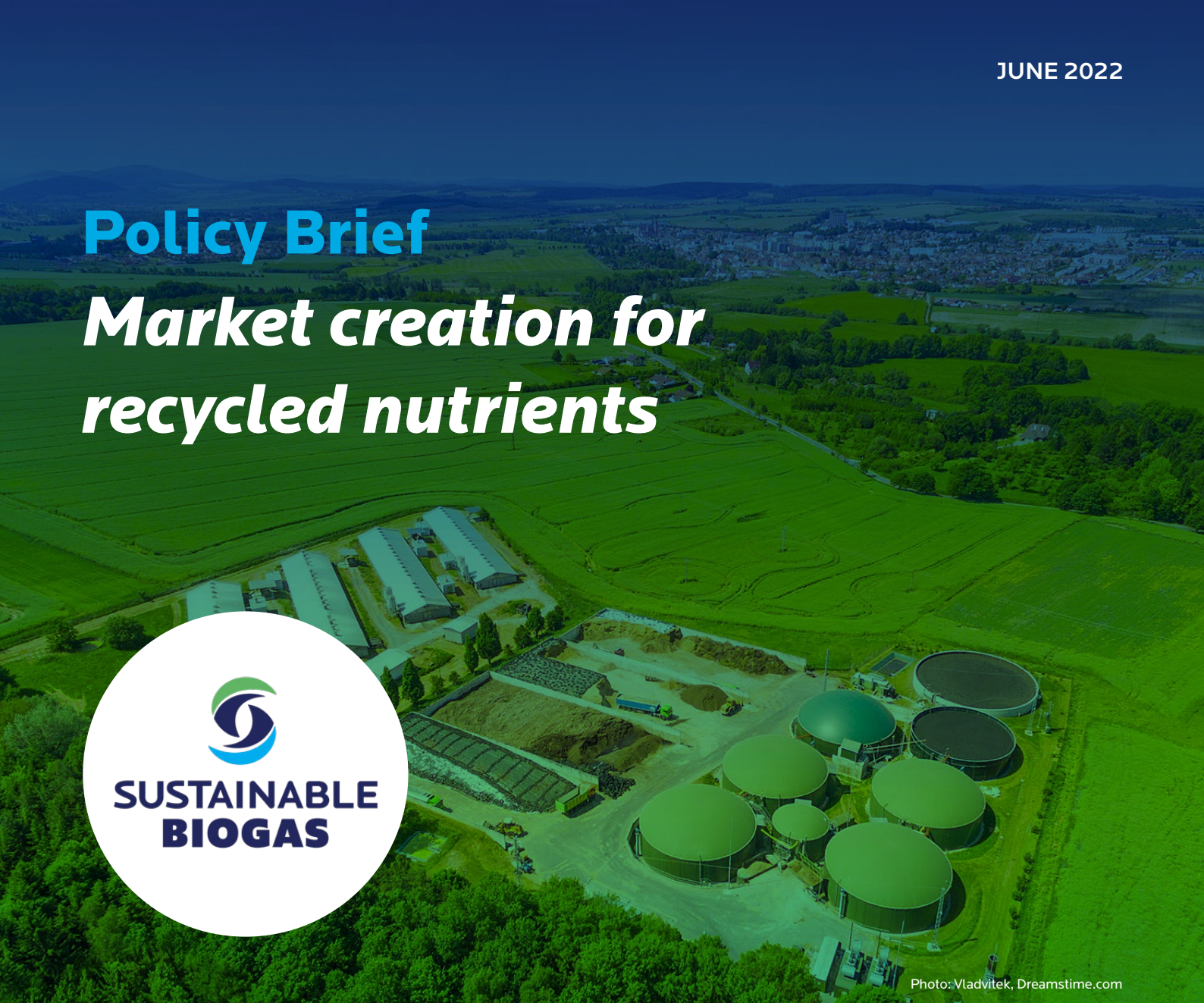
Policy Brief
Market creation for recycled nutrients



SUSTAINABLE BIOGAS

Photo: Vladvitek, Dreamstime.com

Background

The recent energy crisis has pushed up fertilizer prices in Europe. This has increased the public and farmers' interest in recycled and organic fertilizers based on organic biomasses such as manure, biowaste and sewage sludge. For the society it is also important to promote nutrient recycling – the use of recycled-based nutrients is a good opportunity to improve national self-sufficiency of nutrients, also CO2-emissions of the food chain can be reduced in parallel.

One of the most important legislative drivers is the new EU fertilizer product regulation, that was adopted in 2019. It brings organic fertilizers and soil improvers in the same legislative framework with mineral-based fertilizers. This allows these CE labelled fertilizers to be exported freely in the EU internal market. However, organic fertilizers and soil improvers made from sewage sludge cannot be CE marked. The Regulation also allows for products manufactured and used on the basis of national legislation. The legislation is still evolving and there are still a number of factors holding back the development.

Problems

The demand of recycled and organic fertilizers is growing, and the market potential is huge. However, the market for recycled nutrients and fertilizers is underdeveloped. Currently, sufficient quantities of products are not available at the right time where they are needed. Fertilizer users prefer to choose low-cost fertilizers that are familiar brands and high-quality products, easy-to-use in line with cultivation rhythms and with existing equipment. The profitability of investments and business is also weak, which has discouraged manufacturers to put effort on research and development in order to improve the quality and increase the degree of processing of recycled fertilizer products. Factors such as unclear legislation and low price of end products has reduced interests to make expensive investments to process suitable biomasses and digestates further.

The challenge of organic and recycled-based fertilizer products is that they are affected by a number of different pieces of legislation such as waste, fertilizer, product, chemical and agriculture. All of these are still under development both at the national and EU-level. However, the existing legislation already provides the adequate framework for the safe use of organic and recycled-based fertilizers, soil improvers and nutrients. It is true that the legislation has several important areas for development, such as EU-level legislation on the sludge is being out of date, but they are under development.

Bigger problem actually seems to be public prejudice. Recycled nutrients have gained bad reputation based on presumptions that they are smelly and quality is assumed to be poor. Obtaining public approval is essential. Voluntary measures and better communication can be used as tools. The properties of the products should be better communicated.

Recommendations

Based on the findings of the project, the following recommendations on market creation for recycled nutrients to be carried out both in Finland and Latvia can be given:

TARGETS: There is a need to ensure the market development of recycled-based nutrients by setting long term actions and providing support at the beginning of the development curve. Hence, it is recommended to set up national target for the use of recycled nutrients in agriculture. To support the monitoring of the developments and the implementation of measures, the creation of a national development plan by 2035 together with ministries and stakeholders is recommended.

LEGISLATION: To improve the legislative framework for non-CE-marked organic and recycled-based fertilizer products, it is recommended to develop national EoW legislative (end of waste) framework for fertilizer products. It is essential to make clear distinctions between waste and non-waste solutions. The EoW legislative framework is also needed for the better coordination of waste and fertilizer legislation.

VOLUNTARY MEASURES: The legislation sets the basic framework for the safe use of organic and recycled-based fertilizer products. To enhance public acceptance, it is recommended to improve the transparency and quality of product through additional voluntary actions. Voluntary based quality assurance schemes can be utilized wider also for non-CE-marked products.

PUBLIC PROCUREMENT: Quality aspects of nutrient recycling could be included in the public tendering of biowaste and sewage sludge management services. For example, in the procurements announced by the state institutions more points could be awarded (to service providers whose solutions allow for more efficient recycling of nutrients) if the recycled nutrients are used.

OTHER: Beyond CAP27: it is important that organic and recycled-based fertilizer products can be used in farming. Here the Common Agriculture Policy framework plays a key role. The new CAP will be in use at least between 2023-2027, maybe a couple of years longer even. The new CAP already pays more attention to nutrient recycling, but there is still room for improvement. Before drafting the next program, it is recommended to assess at the early phase whether the financial framework for agriculture adequately supports nutrient management and the use of recycled nutrients and fertilizers. The review should include water and air emissions as well as nutrient recycling and energy and nutrient self-sufficiency.

The Sustainable Biogas project worked together with the biogas sector and various stakeholders to reduce nutrient discharges from the whole production chain of the biogas production: from the handling of raw materials to the production and to the safe utilisation of nutrient-rich digestates.

According to the results of the project, sustainable nutrient management in biogas production requires careful consideration when planning, permitting and operating the biogas facilities so that the regional nutrient balance is considered, storages for the feedstocks and digestates are adequate and appropriate, and digestate application is based on the plant needs.

Improving the quality of recycled nutrients and promotion of their use are needed. In addition, the reconciliation of the partly contradictory objectives for sewage sludge management - pollution prevention, nutrient recycling and climate change mitigation - should be continued.

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