NCM's viewpoint on the European Commission's RENURE proposal

The Dutch Center for Manure Valorization (NCM) sees the EC's RENURE proposal as a step in the right direction. However, we also see a number of requirements in the proposal that we believe are both unnecessary and undesirable. These are such that they will significantly hinder the RENURE's potential contribution to a more sustainable agriculture. In concrete terms, we raise three points:

1. Limitation to three technology-products is undesirable

The proposal limits RENURE to three technology-product combinations. In our view, this is a very undesirable restriction. It is also a deviation from the SAFEMANURE report. There are several proven and ready-to-use techniques that produce RENURE-grade fertilizers better and more efficiently than the three mentioned. It is a major obstacle to innovate to achieve even better solutions.

- Our advice is to delete the words "*obtained through reverse osmosis*" from point (c)(i)(2) of the annex and add a point (c)(i)(4): '*or another product that meets the quality criteria as mentioned in points (c)(ii) and (iii)*'

2. Undesirable and unnecessary additional requirement with regard to pathogens

Under (c)(iv) there are a number of requirements regarding the absence of pathogens. This is undesirable. These requirements have no relation whatsoever to the intended use of RENURE or to the risk of nitrate leaching. These requirements create additional energy consumption, costs and investments, and additional administrative burdens for government and business. In addition, the provisions regarding bacteriological quality from the Animal By-products Regulation (EC/142/2011) and/or Fertilizer Products Regulation (EC/1009/2019) remain in force for RENURE.

- Our proposal is to delete this paragraph (c)(iv), and to use local and European regulations that apply to animal manure.

3. Separate application limits for RENURE instead of equivalent to chemical fertilizer limits

The proposal limits RENURE application to a maximum of 100 kg N per hectare. This would mean that a farmer or grower (at least in the Netherlands) would have three nitrogen application limits: one limit for total nitrogen fertilization, within which a maximum of 170 kg N/ha from animal manure and a maximum of 100 kg N/ha from RENURE. There is no substantive reason to consider RENURE as an additional separate fertilizer category. We also find it undesirable: on the one hand because it means an increased burden for administration, law and enforcement for both entrepreneurs and governments, and on the

other hand because it will motivate producers to produce not more of this more environmentally friendly fertilizer than 100 kg of N per hectare.

- Our advice is that this passage with a limit of 100 kg N/ha will be deleted.

Explanation:

On April 19, 2024, the European Commission released the proposal allowing the use of RENURE (chemical fertilizer substitutes). NCM believes this is an important and good step towards a more sustainable agriculture and horticulture. After all, it is an important key for optimized nutrient management for farmers and growers. This improves water quality and encourages the reuse of nutrients, and will close the nutrient cycle on the smallest possible scale. In addition, it leads to lower ammonia emissions and a better agricultural CO_2 footprint. Furthermore, it is important for a sustainable perspective for agriculture. These interests are important in the challenges facing agriculture in the Netherlands and other areas.
This applies in particular to land-based livestock farming (particularly dairy farming). Due to the fertilization rules (in particular a maximum of 170 kg nitrogen per hectare), these farms often have a manure surplus, while crop growth does require additional fertilizer. The recognition of RENURE is of decisive importance for the feasibility and a rapid and broad rollout in practice of several very promising livestock housing systems, with separation of manure and urine at the source, which lead to significantly lower emissions of ammonia and greenhouse gases from livestock farming.

In short, RENURE is a good development and an important part of the solution to the challenges in the Netherlands and other countries to achieve sustainable and therefore future-proof agriculture and countryside.

We are positive that the scientific advice from the SAFEMANURE study (by the Joint Research Center, 2020) has been followed with regard to the substantive criteria of the RENURE fertilizers.

We endorse the need for sufficient assurance of production and use. In our view, this is an important task for the Member States.
In the Netherlands, the conditions will correspond to those for the use of (unprocessed) animal manure. This means that every freight must be reported to the inspection body using the rVDM system, that the loading and unloading location and the transport are monitored with AGR-GPS, that every freight is weighed and that a sample is then taken showing the nitrogen and phosphate contents are determined independently. Fertilizers are applied on agricultural land, using low emission application techniques.
In addition, a quality system with private certification is currently being developed, which provides additional assurance for correct production, quality and volumes of RENURE

fertilizers. The development of this is in the final stages and there is already an existing structure for governance.

However, we see a number of conditions in the proposal that we believe are both unnecessary and undesirable. These are such that they will significantly hinder the RENURE's potential contribution to a more sustainable agriculture. In concrete terms, we raise three points:

1. The limitation to three technology-product combinations
2. The requirement regarding the absence of pathogens
3. The maximum of 100 kg N per hectare

1. Limitation to three technologies is undesirable

The proposal limits RENURE to three technology-product combinations. In our view, this is a very undesirable restriction. It is also a deviation from the SAFEMANURE report.
There are several proven and ready-to-use techniques that produce RENURE-grade fertilizers better and more efficiently than the three mentioned. It is a major obstacle to innovate to achieve even better solutions.
The techniques mentioned also have disadvantages. In practice, struvite is not a fast-release fertilizer (like the mineral fertilizers (Haber-Bosch) with which RENURE is compared), but rather a slow-release fertilizer.
With regard to the reverse osmosis technology: this is a final step that removes water from a liquid manure stream that already meets the substantive criteria. The concentration step can be beneficial to limit logistics costs, but this is certainly not always beneficial. It also costs energy and investments that require considerable scale. When RENURE is used on the own farm (for example a land-based dairy farm), this is not necessary, even undesirable. Partly because in practice water is sometimes added to manure to further limit ammonia emissions.

- Our advice is to delete the words "*obtained through reverse osmosis*" from point (c)(i)(2) of the annex and add a point (c)(i)(4): "*or another product that meets the quality criteria as mentioned in points (c)(ii) and (iii)*"

2. Undesirable and unnecessary additional requirement with regard to pathogens

Under (c)(iv) there are a number of requirements regarding the absence of pathogens. This is undesirable. Hygienization is particularly important when exporting manure or other animal (by-)products, however: RENURE is intended for local application. This requirement has no relation whatsoever to the intended use of RENURE or to the risk of nitrate leaching. This requirement is also not imposed for unprocessed animal manure and causes additional energy consumption, costs and investments, and additional administrative burdens for government and business. In addition, the provisions regarding bacteriological quality from the Animal By-products Regulation (EC/142/2011) and/or Fertilizer Products Regulation (EC/1009/2019) remain in force for RENURE.

- Our proposal is to delete this paragraph (c)(iv), and to use local and European regulations that apply to unprocessed animal manure.

3. Separate use standard for RENURE instead of equivalent for fertilizer use standard

The proposal limits RENURE to a maximum of 100 kg N per hectare. This would mean that a farmer or grower (at least in the Netherlands) would receive three nitrogen application limits: one limit for total nitrogen fertilization, within which a maximum of 170 kg N/ha from animal manure and a maximum of 100 kg N/ha from RENURE.
We consider it unnecessary because RENURE has been shown to have no higher risk of nitrate leaching than chemical fertilizer (Haber-Bosch). Therefore there is no substantive reason to consider RENURE as an additional separate fertilizer category.
We also find it undesirable: on the one hand because it means an increased burden for administration, law and enforcement for both entrepreneurs and governments, and on the other hand because it will motivate producers to produce not more of this more environmentally friendly fertilizer than 100 kg of N per hectare.

- Our advice is that this passage with a limit of 100 kg N/ha will be deleted. In practice, this means that use is limited by the total nitrogen use limits for farmers and growers, which is derived from the uptake by the crops and therefore the risk of nitrate losses. In the Netherlands, these limits have been worked out in detail and are the lowest in the areas with the highest risks.

About NCM

The Foundation 'Netherlands Center for Manure Valorization' (NCM) is the Dutch knowledge center in the field of manure and the processing and valorization of manure. NCM functions as the central point of contact for people from different backgrounds such as businesses, governments, knowledge institutions and social organizations. This creates a better shared knowledge base and vision, and better collaborations and initiatives. And this contributes to strong, circular and environmentally friendly agriculture.
NCM is an independently positioned foundation with its own board and supervisory board. Financing is provided by subsidies and donations (without compensation) from the agricultural business community.

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