

## ESPP input to EU public consultation on circular economy monitoring

Deadline 3 June 2022 https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/13465-Circular-economy-monitoringframework-Revision\_en

ESPP (European Sustainable Phosphorus Platform) welcomes the proposal to improve measurement of progress towards a circular economy. This is important both to assess policies and to enable public and stakeholder understanding and engagement.

"Food, water and nutrients" are one of seven targeted value chains in the focus on areas of the 2020 Circular Economy Action Plan (ESPP eNews n°42) and the indicator framework should cover this with indicators of nutrient recycling or non-recycling (losses), water reuse rates. Indicators on food waste should consider nutrient content, not only raw tonnage.

ESPP welcomes the aims of linking to climate change and the EU zero pollution ambition (importance of contaminant pollutants in secondary materials, e.g. PFAS or pharmaceuticals in sewage or in manures), and the development of material "footprints" (e.g. food nutrient footprints).

The indicators should be linked to EU Critical Raw Materials (CRM) policy, including indicators for % EU import dependency and for % of consumption coming from secondary sources for all materials on the EU CRM list, including 'Phosphate Rock' and 'Phosphorus'. This is coherent with the regular JRC data collection for the updating of the EU CRM List. ESPP regrets that EU CRM policy is not mentioned in the Call for Evidence document.

ESPP proposes the following indicators:

- EU self-sufficiency and end-of-life recycling should be included for all EU CRMs (Critical Raw Materials, including 'Phosphate Rock' = P in any form, and 'Phosphorus' = white phosphorus - P<sub>4</sub>), as well as for aluminium (bauxite is a CRM). Data is collected by EU JRC for regular updates of the CRM list.
- Reuse/recycling rate for resources in wastewater: nutrients (phosphorus and nitrogen), organic carbon, water - see recommendations of Preisner, Smol et al., 2022, in ESPP eNews n°64. Data should be available in Member State reporting for the Urban Waste Water Treatment and Sludge Directives.
- Recycling rates for nutrients in agri-food waste. Food waste should be monitored not only in "tonnage" but also in nutrient content (see e.g. study by Nestlé and WRAP UK in ESPP eNews n°36). Food industry byproducts, including slaughterhouse wastes and animal by-products, should also be included, because these are probably an overall more significant secondary resource than end-of-chain food waste.
- Total losses of phosphorus to surface waters, as this is indicative of non-circularity and is also linked to climate change, in that climate change accentuates eutrophication but also eutrophication can lead to significant methane losses (see ESPP SCOPE Newsletter n°137). Data should be available through European Environment Agency statistics and Water Framework Directive Member State reporting.
- % of nutrients applied to farmland coming from secondary sources versus mineral fertilisers (for phosphorus, nitrogen). Data should be available through Common Agricultural Policy nutrient farm balance reporting.
- Levels of contaminants in secondary materials which pose obstacles to reuse and recycling, in particular PFAS in sewage sludge, pharmaceuticals in manure and in sewage sludge. Data is available in Water Framework Watch List monitoring and in science publications.
- Phosphorus footprint of EU food production, indicative of final consumption of the Critical Raw Material 'Phosphate Rock', of food-chain nutrient efficiency and of phosphorus recycling. Recognised methodologies exist, see e.g. phosphorus footprint of food in Brussels, Papangelou et al.2021 in ESPP eNews n°58.