

17th November 2021

To: **European Commission, Kestutis Sadauskas, DG ENVI, Director, B Circular Economy and Green Growth**
Copies:

DG ENVI: *Mattia Pellegrini, Head of Unit Waste Management & Secondary Materials,*

DG GROW: *Hans Ingels, DG GROW Head of Unit F2 Bioeconomy, Chemicals, Cosmetics*

DG GROW: *Fertilisers Unit: Johanna Bernsel, Theodora Nikolakopoulou, Ana-Lucia Crisan*

DG MARE: *Maris Stulgis, DG MARE, EU Algae Initiative*

Algae production, the circular economy and End-of-Waste

Dear Mr Sadauskas,

Algae¹ cultivation is an effective route to treat wastewater and remove nutrients from water for their recovery, or to treat off-gases², or to remove pollutants from urban air, producing biomass which can be used for energy generation, as a fertilising product, for animal feed or human food ingredient production, or for extraction of other valuable materials. The use of secondary resources as inputs can improve the sustainability of algae production by reducing dependency on mineral fertilisers³.

It was informally suggested by DG ENVI at the webinar on algae and the circular economy, organised by ESPP and EABA, 22 March 2021⁴, that when algae are grown and harvested using wastes⁵ as inputs⁶ they could be considered “not waste”, because they are grown deliberately and there is no intention to “discard” them (c.f. the Waste Framework Directive definition of waste).

We request that the European Commission kindly clarify this question and confirm whether or not, or under what conditions, algae grown and harvested using wastes as inputs are considered as waste. This is important to provide clarity to operators and investors.

This question is also relevant in that the European Commission has funded a number of R&D projects into use of algae for wastewater treatment and resource recovery.

Related to this, we also request that the Commission kindly clarify whether such deliberately produced algae can, under the EU Fertilising Products Regulation 2019/1009, be used directly as CMC1 materials (e.g. after harvesting and drying), or as inputs for production of CMC1 materials (e.g. after processing using non-waste reactants, such as solvent extraction)⁷. We suggest that such algae are not concerned by any of the exclusions of CMC1 point (1): they are not waste, have not ceased to be waste, are not formed from precursors which have ceased to be waste, are not by-products and are not digestate.

The specific case of algae grown using animal by-products as inputs (e.g. manure digestate) may require definition of an Animal By-Product End Point, in order to address the exclusion of CMC point (1e) under the Fertilising Products Regulation, and more generally to ensure sanitary safety, but this is separate and independent from the question of End-of-Waste.

If indeed algae grown using wastes as inputs can be used, under relevant conditions, as CMC1 or as precursors for production of CMC1 materials, we kindly request that this be clarified in the Fertilising Products Regulation “FAQ”.

We are at your disposition to provide further information and look forward to hearing from you.

Yours sincerely,

Ludwig Hermann
President, ESPP
(European Sustainable Phosphorus Platform)

Oliver Loebel
Secretary General, EurEau

Dr Jean-Paul Cadoret
President, EABA
(European Algal Biomass Association)

¹ algae here refers to photosynthetic aquatic organisms: microalgae, macroalgae, bacteria, archaeae, aquatic plants, etc.. - see EABA white paper "What are algae?" <https://www.what-are-algae.com/>

² valorisation of N compounds, sulphur compounds, CO₂, syngas, etc.

³ see e.g. ESPP input to the EU public consultation on the Algae Initiative 17/1/2021 here https://ec.europa.eu/info/law/better-regulation/have-your-say/initiatives/12780-Blue-bioeconomy-towards-a-strong-and-sustainable-EU-algae-sector/F1455029_en

⁴ summary here www.phosphorusplatform.eu/Scope140

⁵ we refer to “wastes” as inputs for convenience, although wastewater and offgases concerned may not have “waste” status.

⁶ e.g. algal ponds or bioreactors for treatment of wastewater or of digestates and for nutrient removal-recovery, or for offgas capture e.g. CO₂, nitrogen, sulphur

⁷ Subject to the final material respecting other CMC1 criteria, in particular the appropriate REACH registration (applicable to the final CMC1 material, not to the algae themselves if chemically modified during processing).