Input to consultation on  
“European Partnership for a Circular bio-based Europe”  
(Inception impact assessment) 30 July – 27 August 2019

The European Sustainable Phosphorus Platform (ESPP) promotes the implementation of sustainable phosphorus management in Europe, in particular phosphorus recycling. ESPP is a non-profit organisation, funded by its members bringing together companies, knowledge institutes and public organisations, in sectors including chemicals, fertilisers, water and waste management and recycling technologies. ESPP acts through stakeholder and inter-sectoral industry dialogue, networking, information dissemination and elaboration of joint proposals to policy makers.

Summary of input

The European Sustainable Phosphorus Platform (ESPP) supports the proposal for a Horizon 2020 ‘Partnership on Circular bio-based Europe’, and welcomes the approach of grouping the two linked objectives of circularity and bio-based economy. We support the recognition that the bio-economy is based on not only agri-forest bio-resources, but also organic wastes and by-products.

Nutrients are a key link between circularity and bio-based economy, both as a valuable product to be recovered and recycled from bio-wastes, biorefineries and in processing of bio-materials, but also as an input essential to “feed” sustainable production of bio-resources. Sustainable biomass production and waste and water management require limiting nutrient losses (eutrophication, atmospheric ammonia …). Phosphate fertilisers are the principal use of the Critical Raw Material ‘Phosphate Rock’. For these reasons, EU water policy and Critical Raw Materials policy, should be cited (as well as climate change, already cited). Links to EU chemical safety and sustainable chemicals policies should also be cited.

ESPP has contacts with several actions of the BBI-JI, and considers that this has facilitated industry engagement with R&I towards implementation. Projects have shown a pragmatic approach to integrating bio-sourced, recycled nutrients into industrial fertiliser production and markets. It is positive that a high proportion of funding is going to industry, inc. SMEs. We agree with the Interim Evaluation conclusion that BBI-JI has created a stimulating R&I environment.

ESPP welcomes the widening of the proposed ‘Partnership’ approach to include stakeholders and public bodies. We recommend identifying the role of networks in this approach, to facilitate dialogue and information exchange and experience transfer, with a significant aspect being the capacity to ensure long-term cooperation beyond the time-scale of R&D programmes.

The administrative processes for engagement of stakeholders, networks and public organisations in ‘Partnerships’ will need to be flexible, in that their operation is different from that of research institutes or companies. In particular, conditions need to be defined whereby
their participation costs (‘out of pocket’ such as travel, salaried staff and volunteer time) can be compensated, without this becoming a distorting financial resource (funding dependence).

Under “A. problem the initiative aims to tackle” we suggest to add the following challenges:

- **Societal prices and externalities**: processing of bio-sourced and recycled materials will often remain more expensive than fossil or extractive-resource based, often because sustainable bio-production and recycling are employment-intensive. Economic models should propose routes to address this.

- **Social acceptance** must be ensured. The public, food industries, supermarkets or media, can be negative towards bio-sourced or recycled products, considered not as “clean” or “safe” as virgin, new materials. This needs to be addressed by both science (data on contaminants, risk assessments, LCA) and by developing positive image actions. This requires dialogue with the food industry and supermarkets.

- **Production for the bio-economy must not impede sustainable food production to feed the world** (and must not be perceived as doing so). Links between the food industry and the bio-economy should be developed (food waste recycling, nutrient recycling, food sustainability criteria, on-farm food and bio-resource production synergies …)

- **Better knowledge of flows of nutrients** must be developed, with reliable and agreed indicators, to ensure sustainable “feeding” of bio-resource production and to identify nutrient recycling potential

- Partnership actions should propose, where appropriate, routes to integrate circularity and bio-economy into other EU strategies and policies

Please see further comments on the roadmap text below.
Additional specific comments on the Roadmap text:

$A$. Context:
3° para.: note that the Interim Evaluation of the BBI-JI showed the success of the Initiative in engaging industry and SMEs

$A$. Problem:
1° para, reference to “potential to create one million new jobs in the bio-based sector by 2030”:
- add the source for this number
- specify in Europe (?)
- this number of “new” jobs should be put in comparison to existing jobs
- add also the potential for job creation in resource recover / recycling from wastes and wastewater, or clarify if this is already included in the “one million”

Challenges:
- 2° bullet point: modify “fertilisers” to “fertilising products” (coherence with wording of Regulation EC 2019/1009)
- add bullet points on: societal prices/externalities; societal acceptance, competition with food production, knowledge of nutrient flows (see explanations above)
We suggest to clarify in $C$. that job creation is expected not only the biomass and nutrients sector, but also waste and wastewater treatment / recycling.

Last para “Under Horizon 2020 … value chains”, (after “broader range of stakeholders”) add “and engaging with networks”,

$A$. Basis
3° para (“Action at EU level …”): add “experience transfer”

$B$. Objectives
1° para, (after “renewable products and nutrients”) add “and sustainable chemicals”
1° para, last line (after “create awareness”) add “engage networks”
2° para, (after “security of supply of raw materials”) add “c.f. EU Critical Raw Materials policy”
2° para, at the end of this paragraph (after “in rural areas”) add “whilst ensuring respect of EU water protection policies (Water Framework Directive, Nitrates Directive …) and without hindering objectives of sustainable food production to feed the world.”

Footnote [1] page 2
Add to the EU policies listed: EU Critical Raw Materials List, EU water protection policies (Water Framework Directive, Nitrates Directive …), EU chemicals safety and sustainable chemicals policies

$C$. Likely scientific and economic impacts
Line 5 (“entire European biomass and nutrients value chain”) modify to “entire European biomass, waste and wastewater, food and nutrients value chain”
**$C. Likely social impacts**

Add that Partnership actions should develop proposals, where appropriate, based on experience, to better integrate circular economy and bio-economy objectives into EU strategies and policies, and to address possible obstacles identified.

**$C. Likely environmental impacts**

Add bullet points:

- **reduction of consumption of EU Critical Raw Materials (phosphate rock)**
- **implementation of EU water policy: limitation of agricultural nutrient losses**