



ESPP input to the EU public consultation on “Horizon Europe Co-design 2021-2024”

7 September 2019

https://ec.europa.eu/eusurvey/runner/HorizonEurope_Codesign_2021-2024

Overall priorities and challenges of Horizon Europe:

Horizon Europe should target resource and climate challenges of sustainability, because of the EU's dependence on imports for many raw materials and for fossil energy. Circular economy and bio-economy are key to sustainable growth in Europe within raw materials and climate challenges.

“Competitive Europe”:

Under this objective, Horizon Europe should support the contributions of resource efficiency, recycling (circular economy) and bio-based sectors to EU competitiveness, including nutrient stewardship and recycling (product development through to market), sustainable and efficient agriculture, bio-based and circular chemistry.

Overall objectives of “Sustainable Europe”:

Target interactions linking resource efficiency and circularity, nutrients and micro-nutrients, food and water systems and climate change to bio-resources production and to employment and life quality, c.f. Soil Health and Food Mission, Circular Bio-Based Europe Partnership.

“Influential Europe”:

The circular & bio-based economy is key to reducing EU dependency on imported raw materials and energy, so reducing international subservience to mineral resource producing nations. These are sectors where Europe can be a world leader, exporting technologies and know-how.

Comments on the proposed “Orientations” document:

https://ec.europa.eu/research/pdf/horizon-europe/ec_rtd_orientations-towards-the-strategic-planning.pdf

Challenges, Priorities

ESPP welcomes inclusion of Critical Raw Materials and circular economy in ‘Competitive Europe’ (p14); and accent on bio-economy and on transition to a circular economy in ‘Sustainable Europe’ (p17-18). These should be linked to ‘Influential’ because EU independence requires reducing imports of raw materials and fossil energy, as does EU credibility in upholding global sustainability agendas.

“Future prosperity” (p10) should refer to circular and bio-based economy as a route to future sustainable prosperity (alongside technology and digital).

New Approaches (p29)

ESPP welcomes Missions, to enhance coherence towards key objectives across HE pillars/tools.

Mission 'Water' (p131) should refer to nutrients, a critical challenge for inland water quality, aggravated by climate change.

Mission 'Soil health and food' (p131) is positive in addressing a systemic approach to the agri-food chain, from agriculture & land use through to food security and healthy diet. We suggest adding two aspects: crop productivity and plant nutrients (for farmers prosperity and food production); and the link through to diet: food processing industry, circularity of agri-food by-products, food waste, food quality and safety, dietary choices and impacts of diet on land use, soil, agriculture and sustainability.

Partnerships (p27)

ESPP welcomes partnerships as facilitating engagement with R&I to implementation, and supports widening to stakeholders and public bodies. We recommend identifying the role of networks, to facilitate dialogue and experience transfer, and to facilitate cooperation beyond time-scale of R&D programmes.

We welcome Partnership 33 'Circular Bio-Based Europe' (p140). Links should be made to Mission 'Soil health and food' and to Partnerships 27, 29, 34, 41 and 43.

Partnership 34 (Water) should refer to nutrients.

Partnership 43 (EIT Raw Materials) should address recycling of critical raw materials, to reduce import dependency.

Cluster 1 Health

The importance of diet should be better recognised and addressed (p33): not only "healthier food choices" (3.1 point 2) but also diet more widely (over-consumption, nutrients and nutrition ...). Refer to the challenge of obesity (c.f. p5).

Engagement of the food & beverage industry is essential, including marketing healthy and sustainable diets as more desirable.

We welcome links made to diets, food and natural resources (p38) and to agriculture and environment (p39). Should link to Mission 'Soil health and food'.

The EU Strategic Approach to Pharmaceuticals in the Environment is mentioned, but specific actions are needed to understand and address challenges posed to Circular Bio-Based Europe by pharmaceuticals in waste streams, inc. monitoring, mitigation, risk assessment.



Cluster 4 Industry

ESPP welcomes recognition of circularity as a key industrial orientation, enabling competitiveness and autonomy.

All Cluster 4 actions should take into account objectives of e.g. 5 Climate, 6 Food etc.

Cluster 5 Climate

Climate science should address impacts of and effects on agriculture and bio-economy (currently in figure p87 not in text) and on water management (add eutrophication and nutrients in \$4.1 p87).

Cluster 6 Food etc.

ESPP welcomes links identified in \$1 (Challenges p111) between environment, diets, resources, nutrients and water. This should cover implications of meat consumption. Development of bio-economy requires adequate supply and sustainable use of nutrients (for biomass production) and management of contaminants (inc. in organic wastes).

Environmental Observation (\$4.1, p115) should include monitoring of secondary and bio-based resources flows (inc. nutrient flows c.f. p118: quantity, quality, contaminants).

Waters (\$4.4, p 120) should address nutrients in inland surface and groundwater quality

We welcome accent on circularity in food systems (\$4.5 p123). Safety (contaminants) and LCA of nutrient recycling should be considered.

Dialogue with the food industry is important to integrate resource & nutrient efficiency, reduced wastage and circularity into sustainability criteria for food & beverage products and for crop purchasing.

In \$4.6 Bio-based and \$4.7 Circularity, we welcome emphasis on nutrient recovery and organics recycling (p125, p127). We suggest to underline the need for sustainable nutrient supply to 'feed' biomass production and to understand and mitigate pollutants in organic waste streams.

Under Circularity, objective should be to make secondary products not only "acceptable" (c.f. p127) but also desirable, including from organic wastes. Support for new fertiliser product development through to market is needed.

We support suggestion to develop "comprehensive EU policy to balance nutrient cycles" (p127), "systemic solutions for sustainable management of nutrient flows" (p128). Cluster 6 actions should contribute to develop such EU policy. Data on nutrient flows is needed to support this, including recycling potential in secondary streams.