



Horizon Europe Brokerage Event
Cluster 6 Calls 2024

Brussels, 26 September 2023

Capture of valuable volatiles created by food systems with AFP

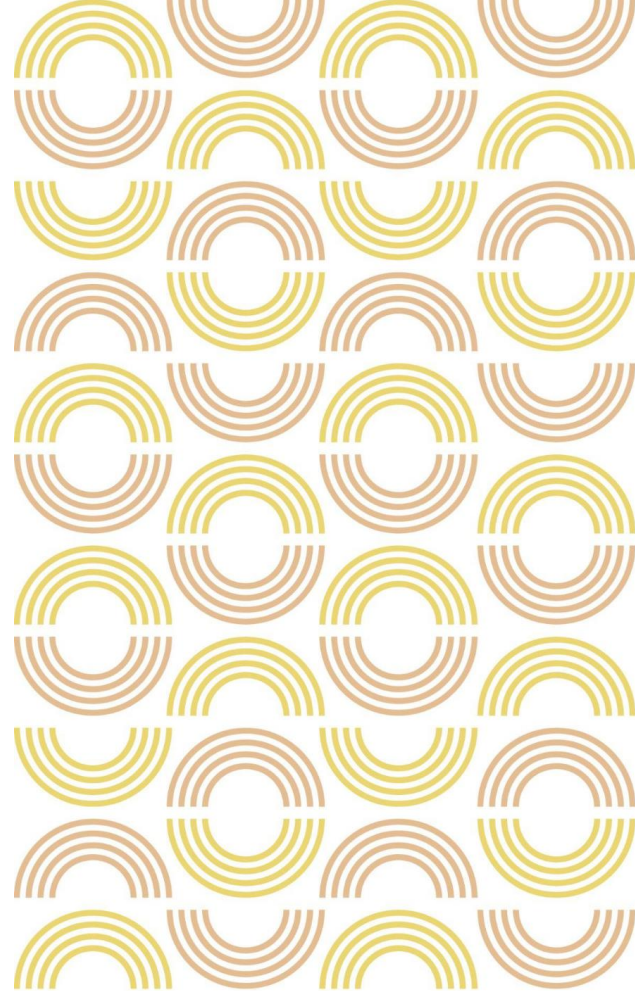
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Ministry of Agriculture and Forestry



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Topic addressed:

- HORIZON-CL6-2024-ZEROPOLLUTION-01-3: Environmental impacts of food systems
- HORIZON-CL6-2024-FARM2FORK-01-8: Preventing and reducing food waste to reduce environmental impacts and to help reach 2030 climate targets

Other topic of interest:

- HORIZON-CL6-2024-GOVERNANCE-01-2: Regional ecosystems of innovation to foster food system transformation

Project idea

CO₂, EtOH and some valuable gases are mixed into the air from the chimneys of the bread factories with the effect of fermentation and baking. These gases will be captured by innovative production processes.

- It is aimed to increase the knowledge about the environmental and climate impacts arising from food systems and to reduce the environmental impacts of food systems.
- Less costly and environmental production of compounds obtained by highly polluting conventional methods will be realized.
- Possible partners: food-chemical industry, political makers, research organizations, NGOs.

Bread Production

Evaluation in terms of CO₂

	Quantity (million tons of bread/year)	CO ₂ emitted (million tons/ year)	Ethanol (billion liters/ year)
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Europe

40

25

5

World

130

81

16

Source: Unal, E. et al. (2023), Utilization of some gaseous compounds that are released during bread production in bread storage; Indexbox



Main expertise offered / sought

- The expertise of our Ministry (MAF) are management, research, monitoring, control, coordination and policy making in title of activity that food and control, crop production, animal husbandry, fishing and aquaculture, agriculture, struggle desertification and erosion, nature protection, water management.
- MAF has carried out and continues to carry out projects on an international and regional basis in many funded programs such as the European Commission, EU Joint Research Center, EU-IPA, World Bank, UNDP-GEF, FAO, EU COST, EU Rural Development Fund, UN UNIDO.
- Project role: coordinator or partner
- The expertises sought in partners: waste management, interdisciplinary engineering, design, IoT technologies

Contact details

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