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FOSC, THE ERA-NET COFUND ON FOOD SYSTEMS AND CLIMATE

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FOSC is the European Research Area Network (ERA-Net) Cofund action on Food Systems and Climate. The consortium consists of 28 partners from Europe, Africa and Latin America. FOSC pulls together resources for a joint research programme and is supported by the European Commission through an ERA-Net Cofund grant. FOSC addresses one of our world's major challenges: How to feed 10 billion people by 2050. The first major activity of FOSC was the organisation of a trans-continental call. The aim of the call is to support scientifically excellent, trans-continental R&D&I projects that contribute to the knowledge base on food systems and climate change. The call had a funding budget of approximately 16 million euros, including the EC-cofunding. The call was launched in 2019 and 17 projects were selected for funding. The projects started in June 2021 and will run for 3 years. The 17 projects focus on various aspects of the food system, including food system resilience, sustainability, technological innovations, risk assessment and availability of healthy food.

A second call was launched in 2021 with the ERA-Net SUSFOOD2: Innovative solutions for resilient, climate-smart and sustainable food systems. The joint call has a funding budget of 7.85 million euros and is supported by 14 funders from 13 countries. Proposals are currently being assessed, and the funded projects will be announced earliest in December 2021.

Circularity in food systems and the upcycling of rest products to contribute to circularity is a key aspect in 7 of the projects funded by the 2019 call. Specific contributions to circularity by FOSC are:

- Integrated farming systems (agriculture and aquaculture), recycling resources and resource efficiency. BLUE-CYCLING;
- Algae-based feed production using sludge and wastewater of aquaculture side-streams. CLIMAQUA;
- Thermophilic breakdown of keratin-laden waste (feathers, hair, hooves) to convert it in commercial valuable products (peptides, amino acids, fish feed, fertilizers). Thermok;

- Integrated chia seed and oyster mushroom production system including the valorisation of side streams as animal feed and biogas production. CHIAM;
- Circularity in smallholder systems, incorporating livestock production into cropping systems for enhancing ecosystem services. TRUSTFARM;
- Soilless precise agriculture and irrigation with wastewater to reduce the use of fresh water, nutrients and the demand of fertile soil. Securefood2050; and,
- Innovative biofertilizers from green and agro-industrial waste boosting yield of cereals and horticulture crops under climate change. Sus-Agri-cc.

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