

FACCE-JPI – realising the European Research Area for a climate neutral, sustainable and resilient agriculture and contributing to the European Green Deal



This year marks many important milestones: it is the 20 years of the European Research Area (ERA) and the 10 years of the Joint Programming Initiative on Agriculture, Food Security and Climate Change (FACCE-JPI), which was conceived as a pillar of the ERA. Furthermore, this year the European Commission launched a range of strategies, including the Farm to Fork strategy, contributing to the European Green Deal.

Over the past decade, FACCE-JPI has built a strong research foundation, aligning and mobilising national research priorities of 24 member countries¹ around a joint Strategic Research Agenda that has recently been updated to reflect priorities of partner countries and the European Commission.

FACCE-JPI

- 24 members in a Governing Board
- High level Scientific and Stakeholders Advisory Boards

To date

- 18 research actions initiated
- 121 research projects
- 260 million euros total funding
- Over 600 publications
- 850 research partners
- Focus of European activity for global partnerships: Collaboration with Global Research Alliance, Belmont Forum, BiodivERsA ERA-NET, JPIs HDHL, Oceans, Water and Urban Europe, among others.

FACCE-JPI Vision

A European Research Area addressing sustainable and resilient agricultural production systems to provide adequate and nutritious food and to contribute to a climate neutral Europe by 2050.

FACCE-JPI Mission

Aligning and co-designing research, and delivering knowledge for addressing the challenges of sustainable and resilient agricultural production systems integrating the climate system, the food system and the ecosystem.

The research funded under FACCE-JPI contributes to several of the goals of the European Green Deal, and especially to the Farm to Fork Strategy and the Biodiversity strategy, as well as to the new European Research Area.

Contributions of FACCE to the European Green Deal strategies

Climate neutrality

The Green Deal sets out the ambition of “no net emissions of greenhouse gases by 2050”. Through FACCE-JPI, significant **research on reducing agricultural greenhouse gas emissions and storing carbon in soils and biomass** has been carried out.

- Multi-partner call on Agricultural Greenhouse Gas emissions, covering topics both on assessing and reducing GHG emissions in livestock and crops.
- FACCE ERA-NET Plus on “Climate Smart Agriculture” which encompasses both mitigation and adaptation
- FACCE ERA-NET Plus on Climate Smart Agriculture focused on sustainable production under climate change with projects that covered crops, grassland and livestock as well as pests under climate change.
- ERA-NET ERA-GAS has funded several projects (also including a joint call with the ERA-NETs SusAn and ICT-AGri2) with the goal to find solutions that can reduce agricultural greenhouse gas emissions.
- The European Joint Programme (EJP) cofund on soil, “Towards climate-smart sustainable management of agricultural soil”, which studies, among other topics, carbon sequestration in agricultural soils.

Farm to Fork: A fair, healthy and environmentally friendly food system

The Farm to Fork Strategy describes a roadmap towards “a fair, healthy and environmentally friendly food system”, aiming to “reduce the environmental and climate footprint of the EU food system and strengthen its resilience, ensure food security in the face of climate change and biodiversity loss and lead a global transition towards competitive sustainability...”.

The FACCE-JPI portfolio of projects contributes to important knowledge enabling **sustainable food production**, and thus **ensuring food security**.

- The Knowledge Hub MACSUR was dedicated to understanding climate impacts on European agriculture through a modelling approach, with sub-hubs on crop production, livestock and grasslands and trade. It is continued with a science to policy hub, bringing the acquired knowledge to policy makers.
- The ERA-NET FACCE SURPLUS funded projects on sustainable and resilient agriculture both for food and non-food production, contributing to a circular bioeconomy.
- The ERA-NET SusCrop deals with sustainable crop production, including breeding for improvement of plant health, protection, production and resilience and integrated pest and crop management methods.
- ERA-NET Food Systems and Climate Change (FOSC) addresses climate and food systems. The first call's topics opened for climate change-related risks including food losses, technological solutions, as well as resilience and volatility aspects in both production and food markets.
- Together with the Belmont Forum, FACCE-JPI established a call on Land Use and Food Security, funding projects, including two with a focus on Africa.
- The Knowledge Hub on Food and Nutrition Security is looking at adaptive and mitigatory strategies to manage the impact of climate change on nutritional quality of food and possible effects on malnutrition.

Ecosystems and biodiversity

The European Green Deal seeks to protect biodiversity and ecosystems services as described in the Biodiversity Strategy. FACCE-JPI has also recognised the importance of preserving biodiversity and ecosystems services in order to ensure sustainable food (and non-food) production and food security.

- Together with the ERA-NET BiodivERsA, FACCE-JPI funded projects on the beneficial interactions between biodiversity and agriculture and on how policies and governance can best promote nature-friendly systems.
- With the Water JPI, projects have been funded on the sustainable management of water resources in

agriculture, forestry and freshwater aquaculture sectors with the aims of increasing the efficiency and resilience of water uses and monitoring and reducing soil and water pollution.

- Through the EU project ALL-Ready, FACCE-JPI will actively contribute to the future European partnership on Sustainable farming. It will support the development of the partnership on agroecology.

The New ERA

Understanding the challenges is not enough, moving forward on the priority pathways is about the future, on how we can translate the challenges into actions and transition/transformation pathways. In the new ERA, the European Commission sets out a 14-point action plan aimed at increasing impact of EU research, including through the valorisation of existing knowledge and better engagement of all the potential stakeholders including the private sector. **FACCE-JPI is itself a powerful 'European Research Area Forum for Transition', that already brings together its 24 member countries, committed to aligning priorities, with 10 years of experience building trust and working together.** At the heart of FACCE-JPI's new Strategic Research Agenda are the research questions needed to bring about the much-needed transformation in the agricultural sector. This includes capitalisation and valorisation of results to build an evidence-base for policy-making and outreach to end-users. Indeed, **FACCE-JPI provides a platform for science support to policies and practices, by bringing experts from science, policy, society and business together.** FACCE-JPI, with its international reputation created by delivering innovative solutions in climate resilience, is in a very strong position to contribute to the global solutions that policy makers and end users are seeking under Horizon Europe.

In conclusion, today FACCE-JPI is ready to contribute to Horizon Europe, European policy ambitions and our common future by offering its 10 years of experience and its results to building sustainable and resilient agricultural production systems to provide adequate and nutritious food and to contribute to a climate neutral Europe by 2050.

ⁱ 19 EU Member States, Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hungary, Ireland, Italy, Latvia, Lithuania, Netherlands, Poland, Romania, Spain,

Sweden, 3 Associated States: Norway, Switzerland, Turkey, plus United Kingdom and international partners: New Zealand