

Sustainable Food Security: Sustainable food production systems					
no	Topic	Keywords	Call	Project type	Participants interested
1	Supporting agricultural diversity and regional products	(plant or animal) genetic resources; use and preserve genetic variation; adaptability to variable environments; products with a regional identity; specialised markets; supporting socio-economic, legal and organisational framework.	2014	Collaborative project (CP)	
2	Genetic resources to sustain current and future agriculture and forestry	promotion of genetic resources in order to reduce current bottlenecks at the interface between conservation and use of plant and animal genetic resources in breeding and farming activities.	2015	CP	
3	Understanding and managing soil quality for better yields	health status of agricultural soils; soil-agronomy interactions; soil husbandry practices; organic carbon content; nutrient cycling and water storage ability; composition of the soil organism community; plant-fungal-microbial interactions.	2014	CP	
4	Addressing the productivity gap in crops	genomics, modelling and agro-ecology: capture the interactions of the genotype with its environment and management practices in breeding programmes and farm management.	2015	CP	C.A. de Bie
5	Increasing efficiency of terrestrial livestock production through genetics and nutrition and alternative feed sources	precision feeding; diversification; new phenotypes to be integrated into breeding schemes; European self-sustainability; socio-economic aspects of production systems (business plans, management systems); reduced waste emission; involvement of livestock industry.	2015	CP	
6	Optimising external nutrient inputs in intensive crop productions systems in Europe	ground and surface water quality; soil contamination; GHGs emissions; precision farming tools and techniques; in-field demonstration.	2015	CP	

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7	Tackling losses from animal diseases	research activities will cover specific diseases of poultry and swine; better understand interaction between the immune system of swine and poultry species and their specific pathogens; develop innovative and multivalent vaccines; demonstration activities of solutions; involvement of animal pharmaceutical industry; SME involvement; One Health perspective	2014	CP	A. Skidmore
8	Practical solutions for pests, weeds and invasive species in agriculture and forestry	Integrated Pest Management (IPM); Plant Protection Products; prevention mechanisms and management solutions using the latest technologies: robotics, ICT, sensors, remote sensing, and image processing; demonstration activities; involvement of industry and SMEs; international cooperation with third countries	2014	CP	A. Skidmore; R. Zurita Milla; A. Vrieling
9	Conservation Agriculture strategies for Europe	effects of soil labour and tillage operations (environmental impact and competitiveness); assess potential and real benefits of Conservation Agriculture techniques; consider different European pedo-climatic conditions and varieties of cropping systems	2014	CP	
10	Towards more resource-efficient food processing methods	review current food production systems in SMEs in order to optimise current processes or develop alternative processes; reduce food waste; improve food safety and quality; resource-efficiency along the entire post-harvest chain; increased efficiency in the use of raw materials; use of ICT solutions; demonstration activities	2015	SME-instrument	

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11	First Market replication of innovative solutions for sustainable novel food processing technologies	first application (either new in Europe or new to the application sector) and deployment of an innovation that has already been demonstrated but not yet applied or deployed; close-to-market activities; involvement of users/ buyers	2015	CP (first market replication project)	

Sustainable Food Security: Safe food and healthy diets					
No	Topic	Keywords	Call	Project type	Participants interested
1	Coping with the challenge of biological contamination of crops	minimising the contamination by mycotoxins for several major crops and provide management solutions for safe use; integrated approaches to control contamination from crop production to feed and food chains; research activities will cover all stages from production, harvest to post-harvest; availability and development of control tools;	2015	CP	
2	Novel sustainable sources of proteins	tackle inefficiency of conversion paths from plant proteins into animal proteins for human consumption; holistic integrated approach of all aspects of the production and processing chain; development of quality, safety and regulatory criteria at a European level; consumer acceptance; emphasis on dissemination, communication and exploitation activities; involvement of participants from INCO countries;	2014	SME instrument	A. Skidmore

Sustainable Food Security: Safe food and healthy diets					
No	Topic	Keywords	Call	Project type	Participants interested
3	Improving the control of infectious epidemics and foodborne outbreaks through rapid identification of pathogens	global standards for faster identification of pathogens; better and more integrated surveillance tools for infectious diseases; One Health approach; consumer trust; sequenced-based methods; information system for all sectors; predictive Risk Assessment models; ensure links and consistency with existing networks and databases	2014	CP	C.A. de Bie

Sustainable Food Security: Global drivers of food security					
no	Topic	Keywords	Call	Project type	Participants interested
1	Small farms but global markets: the role of small and family farms in food security	social agriculture versus economies of scale: balance between economic-environmental-social sustainability; SMEs; differentiation between urban and rural dimensions of food and nutrition security; requirements in terms of infrastructure, supply chain, and governance	2014	CP	R. de By; R. Zurita Milla
2	Towards global sustainable food governance	develop and test an analytical framework encompassing the impacts of the various factors of globalisation on food security as well as on people's right to food sovereignty; identify the main economic and policy drivers; focus on long-term economic, environmental and social sustainability; impact of trade and climate change on poverty; food wastage; domestic productivity; Millennium Development Goals	2014	CP	

Sustainable Food Security: Global drivers of food security					
no	Topic	Keywords	Call	Project type	Participants interested
3	Socio-economic challenges, price shocks, food choice and hidden hunger	how do the dynamics of the various food systems and the drivers of their development, agricultural commodity, price instability, and the global socio-economic context influence food choices; behaviour of stakeholders in the food chain; consumption patterns and their main socio-economic drivers; hidden hunger, gender dimension, quantification of consumer behaviour	2015	CP	C.A. de Bie; A. van der Veen; T. Filatova; A. Voinov

Blue Growth: Sustainably exploiting the diversity of marine life					
no	Topic	Keywords	Call	Project type	Participants interested
1	Improving the preservation and sustainable exploitation of Atlantic marine ecosystems	model, understand and predict shifts in the dynamics of Atlantic ecosystems; understanding of the biogeographic patterns, biodiversity and ecosystem services and goods supported by different marine ecosystems; new adaptive management approaches;	2014	CP	
2	Marine biodiversity for better valuing marine life	holistic and comprehensive response to rapidly changing marine biodiversity (from genes to ecosystems); develop spatio-temporal scenarios for biodiversity change supported by ecosystem, socio-economic and climatic models and assessing the implications; establish a base-line of marine biodiversity status to enable the creation of a value system	2015	CP	
3	Novel marine derived biomolecules and industrial biomaterials	industry-driven projects; marine resource identification, supply, improvement on technical aspects of the discovery pipelines, production in suitable biological systems; activities should cover the innovation chain from research to development and proof of concept	2015	CP	

Blue Growth: Sustainably exploiting the diversity of marine life					
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4	Enhancing the industrial exploitation potential of Marine-derived enzymes	address development of technologies for high throughput enzyme screening and/ or for the expression of marine enzymes and proteins through dedicated hosts; cooperation with industry; property rights and intellectual property	2015	CP	

Blue Growth: Multiuse offshore platforms - moving economic activities offshore					
no	Topic	Keywords	Call	Project type	Participants interested
1	Preparing for the future offshore economy	multi-use offshore platforms; overcoming challenges related to surface support facilities, control systems, fluid and solid transport or remotely operated robots/ vehicles; identify potential socioeconomic developments in the new maritime economy and corresponding business models;	2014	CSA	
2	Delivering the sub-sea technologies for new services at sea	unmanned underwater operations; feasibility studies and definition studies of the main components required to work undersea; Remotely Operated Vehicles and Subsea Construction systems; Specialised robots and autonomous underwater vehicles; subsea factory machineries;	2015	CP	
3	Building with nature - smart and sustainable dredging	balance sustainable functioning of ecosystems with the demand for development and use; hydraulic infrastructure development process (physical, ecological and social systems); one or more pilot projects	2014	CP	
4	Response capacities to oil spills and marine pollutions	developing an integrated response capacity to major pollution events, particularly oil and gas, in extreme conditions; combine oceanographic prediction of the pollution behaviour, understanding of impact of pollution, physical intervention and bioremediation an their impact on ecosystems, the use of specialised vessels and underwater vehicles	2015	CP	

Blue Growth: Seabed mining					
no	Topic	Keywords	Call	Project type	Participants interested
1	Seabed mining - preparing next steps	consider different options for a European largescale pilot project, including the selection of one or more sites; aim is to answer two questions: (1) Is seabed mining economically feasible? (2) Can it be environmentally acceptable?	2014	CSA	

Blue Growth: Ocean observation technologies/ systems					
no	Topic	Keywords	Call	Project type	Participants interested
1	Developing in-situ Atlantic Ocean Observations for a better management and exploitation of the maritime resources	Integrated Atlantic Ocean Observing System (IAOOS); systematic collection of ocean observations recorded both remotely and in situ; interoperable exchange of ocean observation as promoted through the Group on Earth Observation (GEO); international partners from both sides of the Atlantic	2014	CP	
2	Acoustic and imaging technologies	innovative technologies to improve the performance of sensors needed for acoustic detection or imaging, as well as the (fixed or mobile) platforms supporting them and signal processing to interpret raw data; projects should bring together marine scientists, technology providers and end users	2015	CP	

Blue Growth: Horizontal aspects, socio-economic sciences, innovation, engagement with society and ocean governance across the blue growth focus area					
no	Topic	Keywords	Call	Project type	Participants interested
1	Monitoring and dissemination activities	overview of EU-funded marine and maritime research projects/ actions; analysis of key results of these projects	2014	CP	
2	Supporting SMEs efforts for the development - deployment and market replication of innovative solutions for blue growth	demonstrated solutions that have not yet been applied in the market	2014	SME instrument	

Blue Growth: Horizontal aspects, socio-economic sciences, innovation, engagement with society and ocean governance across the blue growth focus area					
no	Topic	Keywords	Call	Project type	Participants interested
3	Ocean literacy - Engaging with society - Social Innovation	socioeconomic consequences in coastal areas and offshore; facilitate interactions between stakeholders; raise awareness of marine/ maritime activities; improve acceptability; social innovation; mutual mobilisation and learning tool	2014	CP	
4	Further consolidating the ERA in marine sciences	CSA to support JPI Oceans; operational network of marine research funding agencies and other key players in Europe; optimised use and planning of research infrastructures		JPI	
5	Strengthening international cooperation in the field of marine sciences	international research collaboration framework to address the sustainable management of the oceans; either a focus on the Atlantic or open to international cooperation in all ocean areas	2014	CSA	
6	European polar research cooperation	coordinate polar research in Europe and develop a comprehensive European polar Research Programme; stakeholder dialogue; interoperability of and open access to observational data and related products	2014	CSA	

General Call - Sustainable Agriculture and Forestry					
no	Topic	Keywords	Call	Project type	Participants interested
1	Closing the research and innovation divide: the crucial role of innovation brokering and knowledge exchange	connectivity of relevant actors such as innovation centres and innovation brokers and exchange of existing knowledge on innovative approaches in agriculture and in rural areas	2014	CSA or CP (tbc)	
2	Assessing the sustainability of EU livestock production	conditions of sustainability of the livestock sector in the EU	2015	CP - R&D Project	
3	Unlocking the growth potential of rural areas through enhanced governance and social innovation	improved understanding of social innovation dynamics in agriculture and rural development towards sustainable agro-food systems and vibrant rural societies	2015	CP - R&D Project	

General Call - Sustainable Agriculture and Forestry					
no	Topic	Keywords	Call	Project type	Participants interested
4	Harmonized forest data and monitoring of sustainable forest management	consolidation of an EU framework to improve and harmonize forest data and information	2014	CP - R&D Project	A. Skidmore
5	Forest management models for productive stands and resilient ecosystems in a changing environment	development or improvement of forest management options/models and silvicultural techniques	2015	CP - R&D Project	A. Skidmore; T.A. Groen; A. van der Veen
6	Diet, impulsivity and compulsivity	new insights into the influence of diet, the sugar metabolism, fat and protein content, vitamin and mineral balance, amino-acids and food additives, lifestyle and the socio-economic environment on these behavioural sorders and propose solutions to this challenge	2014	CP - R&D Project	
7	Tackling malnutrition in the elderly population	based on a better understanding of the mechanisms of ageing process, strategies to prevent malnutrition in the elderly will be developed	2015	CP - R&D Project	
8	Assessing health risks of combined human exposure to food related toxic substances	the state-of-the-art frameworks already in practice at international level should be reviewed in order to reach a harmonised approach	2015	CP - R&D Project	
9	Edible oils and fats	improving the quality of oils and fats, new or improved oils and fats to the market, production and processing more sustainable	2015	SME Instrument	
10	Towards a gradual elimination of discards in European fisheries	innovative technologies and practices, as well as simulation modelling	2014	CP - R&D Project	
11	Tackling disease related challenges and threats of European farmed aqautic animals	improving and understanding of parasite life-cycles/stages identifying production site characteristics that might be more appropriate for reducing the riskof disease outbreaks	2014	CP - R&D Project	

General Call - Sustainable Agriculture and Forestry					
no	Topic	Keywords	Call	Project type	Participants interested
12	Building a dialogue platform on aquaculture between EU and Latin America	identifying issues of common interest with high potential for aquaculture development	2014	CP - R&R Project	

General Call - Sustainable Agriculture and Forestry					
no	Topic	Keywords	Call	Project type	Participants interested
13	Implementation of an Ecosystem-based approach for European aquaculture	providing operational tools to support national administrations to predict environmental impacts	2015	CP - R&D Project	
14	Ensuring economic sustainability and competitiveness of European fisheries and aquaculture sectors to reap the potential of seafood markets (ICO dimension)	economic sustainability of European fisheries and aquaculture production segments, systems and products, taking into account world chains and markets	2015	CP - R&D Project	

Sustainable and competitive bio-based industries					
no	Topic	Keywords	Call	Project type	Participants interested
1	Supporting biorefineries development through the broadening and optimisation of available biomass crops	optimisation of biomass crops production and/or composition, especially for novel, undomesticated or neglected species, for the use in integrated biorefineries	2014	CP - R&D	
2	Expanding the range of bioactive natural compounds available for industrial application	expanding the range of natural molecules for pharmaceutical and industrial purposes, advancing knowledge on interactions of plants with environment and improving chemical production processes	2014	CP - R&D	

Sustainable and competitive bio-based industries					
no	Topic	Keywords	Call	Project type	Participants interested
3	Meeting the demand of renewable oil crops as a source of bio-based products	broadening the range of suitable oil feedstock candidates and developing new economically and environmentally viable end bio-based products	2014	CP - R&D	
4	"Green factories": innovative plant molecular farming approaches	developing a full range of additional benefits arising from plant based production	2015	CP - R&D	
5	Converting CO2 into chemicals	development of technologies for conversion	2015	CP - R&D	
6	Public procurement networks on innovative bio-based products	preparing the grounds of a PPI on biobased products	2015	CSA	

Cross-cutting actions covering all the activities					
no	Topic	Keywords	Call	Project type	Participants interested
1	Building a dialogue platform on agro-food between EU and China	tbd	2015	CSA	
2	Engaging society, reaching end users and linking with policy makers for a participative governance of the bioeconomy	enhancing the availability and quality of information on bioeconomy products and processes	2014	CSA	
3	Bridging across Horizon 2020 research and innovation projects in food security, sustainable agriculture, marine and maritime research and the bioeconomy	integrating EU research projects in the different appts of Horizon 2020 and strengthening exchange of information	2014	CSA	A. Skidmore; C.A. de Bie
4	Networking of Bioeconomy relevant ERA-NETs	a platform contributing to the ERA	2014	CSA	

Cross-cutting actions covering all the activities					
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5	ERA-NET on sustainable and resilient agriculture for food and non-food systems in the bio-economy	pooling of national expertise and financial resources and launching joint international calls	2014	ERANET	A. Skidmore
6	Public-Public Partnership in the bioeconomy	PPP in rural development initiatives, monitoring and mitigation of GHG(MMAGG), SCP, sustainable livestock production	2015	ERANET	

Contribution from SC2 to other Focus Areas

no	Topic	Keywords	Call	Project type	Participants interested
1	Ensuring sustainable use of agricultural waste and by-products	evaluation and development of existing and new techniques and use of materials	2015	CP - R&D	
2	A systems approach for the reduction, recycling and re-use of food waste	addressing approaches to reduce food waste and packaging materials and ways to convert food waste into high quality, value-added by-products	2014	CP - R&D	
3	Converting biodegradable wastes into high added value products in biorefineries applying a cascading approach	using the cascading approach	2015	CP - CTM	

Personalising Health and Care

no	Topic	Keywords	Call	Project type	Participants interested
1	Paving the way for substantiation of health effects of foods	producing a globally applicable, harmonized roadmap for harmonisation of human intervention studies on food and health	2014	CP - R&D	