

THE FRAMEWORK PROGRAMME FOR RESEARCH AND INNOVATION

HORIZON 2020



Opportunities for EU – LAC cooperation within the bio-economy related calls

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4 calls

- Call for Sustainable Food Security (« SFS »)
- Call for Blue Growth – Demonstrating an ocean of opportunities (« BG »)
- Call for a Rural Renaissance – Fostering innovation and business opportunities (« RUR »)
- Call for the bio-based innovation for sustainable goods and services – supporting the development of a European Bioeconomy



Two places to look for ...

- **Societal Challenge 2**: « *Food security, sustainable agriculture, ... and the bioeconomy* ». Focus on upstream (biomass supply) and downstream (markets) activities. Bi-annual Work Programmes (now draft WP for 2016-2017 calls)
- **Bio-Based Initiative (BBI)**: Public Private Partnership. The Bio-based Industries Consortium (BIC) is the private partner in the €3.7 billion Public-Private Partnership on Bio-based Industries (BBI) with the EU. Co-funding of calls, focus on bio-refinery. Annual Calls, now WP for 2015. Same participation rules as H2020!



Which opportunities for international cooperation?

- Eligibility for participation: all topics open to participation of third countries, once the minimum criteria met (3 partners of EU or countries associated to H2020)
- But not all countries are eligible for receiving funds (BRICS + Mexico!)
- SFS: area with **high EU-added value and particular relevance for international cooperation**, as the EU has leading expertise in sustainable food production and the access and use of resources are of truly transnational concerns. For 2016-17: focus on collaboration with Africa and China
- Bioeconomy: international cooperation will be continued with countries that have shown interest or have a strong BE strategy themselves.

→ Challenges of global nature, requiring global solutions in cooperation with important international cooperation partners;
develop win-win solutions

Multi-actor approach: Interactive innovation model

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- **New approach to speed up innovation through co-operation**
- **Demand driven innovation:** Development of research into practical applications and the creation of new ideas thanks to interaction between various actors such as farmers, advisors, businesses, NGOs, etc in a bottom-up process.
- **All along the project:** planning of work and experiments, execution, dissemination of results and a possible demonstration phase.
- Project should **result in practical knowledge easily understandable and accessible** ; should feed in the European Innovation Partnership (EIP) Agri
- This approach should be **reflected in the methodological description of project proposals** (adequate choice of key actors with complementary types of knowledge -scientific and practical)... accompanied by the relevant **resources and expertise**
- Innovation:
 - Technological, non-technological, organisational, social.
 - Based on new but also on traditional practices in a new geographical or environmental context.
 - The new idea can be a new product, practice, service production process or a new way of organising things



Key pointers

- **With regards funding opportunities in BE** : refer to the BBI calls. 2015 WP of the BBI should be published in the coming days. In summary: societal challenge 2 finances the upstream and downstream actions of the BE value chain (the supply and the market); the BBI calls focus on biorefinery issues ...
- The focus for **international cooperation** within the 2016-2017 calls is on Africa (EU-AFRICA R&I Partnership) and China (also due to political engagement).
- As a principal, all topics open to participation of third countries; but no targeted LAC topics for these 2 years. Not to mix up eligibility for participation with eligibility for funding under H2020 (emerging countries may participate but can not be funded by H2020).
- **A new version (the 3rd one, kind of final DRAFT) of the Work programme of societal challenge 2** will be circulated end of June/beginning of July. The publication of the final official version is foreseen for the end of September. Some Eu Member states claim however that the EC should do a pre-publication of the final draft in July (to permit teams to get started)
- There will be a **societal challenge 2 infoday in Brussels on 25/11**
- In the top 10 topics I would put those who explicitly refer to international cooperation

Topics Sustainable Food Security call (2016 – 2017)

Topic Title	Instrument	Comments
SFS - 1. [2016]: Dealing with multiple and combined stresses: approaches to improve water and nutrient use efficiency in crop production	RIA	2 stages; multi-actor approach
SFS - 2. [2016] Teaming up for good: Associations and mixtures as drivers of productivity and resilience in cropping systems	RIA	2 stages; multi-actor approach; international cooperation is encouraged
SFS - 3. [2016] Testing and breeding for sustainability and resilience in crops	RIA	2 stages
SFS - 4. [2017] New partnerships and tools to enhance European capacities for in-situ conservation	CSA	While targeting in particular EU capacities, Projects are encouraged to draw on good examples from outside EU; multi-actor approach
SFS - 5. [2016]: Robotics Advances for Precision Farming	RIA	2 stages Budget from LEIT-ICT budget
SFS - 6. [2016]: Weeding - Strategies, tools and technologies for sustainable weed management	RIA	2 stages; multi-actor approach

Topics Sustainable Food Security call (2016 – 2017)

Topic Title	Instrument	Comments
SFS - 7. [2016/2017]: Organic Breeding – Increasing the competitiveness of the organic breeding and farming sectors	RIA	2 stages; multi-actor approach
SFS - 8. [2017]: Organic Inputs – Contentious inputs in organic farming	RIA	2 stages; wide geographic coverage ... relevant third countries; multi-actor approach
SFS - 9. [2016] Spot on critical outbreak of pests: The case of <i>Xylella fastidiosa</i>	RIA	2 stages International collaboration is encouraged with partners from Third Countries affected by the pest; multi-actor approach
SFS - 10. [2017] Research and approaches for newly emerging diseases in plants and terrestrial livestock	RIA	2 stages; international collaboration is encouraged; multi-actor approach
SFS - 11. [2016] Challenges for disease management: Perennial crops in the tropics and sub-tropics	RIA	2 stages International collaboration with Third Countries is essential to meet the requirements of the topic; multi-actor approach

Topics Sustainable Food Security call (2016 – 2017)

Topic Title	Instrument	Comments
SFS - 12. [2016]: Support for international research on animal health	CSA	
SFS - 13. [2016]: Validation of diagnostic tools for animal and crop health	IA	2 stages
SFS - 14. [2016]: Understanding Host-Pathogen Interactions	IA	2 stages
SFS - 15. [2017]: Breeding livestock for resilience and efficiency	RIA	2 stages; multi-actor approach
SFS - 16. [2017]: Bee health and sustainable pollination	TBC	2 stages
SFS - 17. [2017]: Innovations in plant protection	RIA	2 stages; multi-actor approach
SFS - 18. [2016] Framework Partnership Agreement supporting Joint Actions towards Public-Public Partnerships in the Bioeconomy	Eragnet	
SFS - 19. [2016] ERANET COFUND: Public-Public Partnerships in the bioeconomy	Eragnet	



Topics Sustainable Food Security call (2016 – 2017)

Topic Title	Instrument	Comments
SFS - 20. [2017]: Towards a science-based regionalisation of the Common Fisheries Policy	RIA	2 stages
SFS - 21. [2016-2017]: Advancing basic biological knowledge and improving management tools for commercially important fish and other seafood species	RIA	2 stages
SFS - 22. [2017]: Smart fisheries technologies for an efficient, compliant and environmentally friendly fishing sector	IA	
SFS - 23. [2016]: Improving technical performance of the Mediterranean aquaculture	RIA	2 stages
SFS - 24. [2016]: Reinforcing international cooperation on sustainable aquaculture production with countries from South-East Asia	CSA	Focus south-east Asia
SFS - 25. [2016] Standing Committee on Agricultural Research (SCAR) Support Action	CSA	

Topics Sustainable Food Security call (2016 – 2017)

Topic Title	Instrument	Comments
SFS - 26. [2016]: Legumes - Transition paths to sustainable legume-based farming systems and agri-feed and food chains	RIA	2 stages; multi-actor approach
SFS - 27. [2017]: Permanent grassland – farming systems and policies	RIA	2 stages; multi-actor approach
SFS - 28. [2017]: Functional Biodiversity – Productivity gains through functional biodiversity – effective crop pollinators and pest predators interplay	RIA	2 stages; multi-actor approach
SFS - 29. [2017]: Socio-Eco-Economics – Socio economics in ecological approaches	RIA	2 stages
SFS - 30. [2017]: Closing loops at farm and regional levels to mitigate GHG emissions and environmental contamination: focus on carbon, nitrogen and phosphorus cycling in agro ecosystems	RIA	2 stages; multi-actor approach
SFS - 31. [2016] – Farming for tomorrow: developing an enabling environment for resilient and sustainable agricultural systems	RIA	2 stages
SFS - 32. [2017]: Promoting and supporting eco-intensification of aquaculture production systems: inland (including fresh water), coastal zone and offshore	RIA	2 stages



Topics Sustainable Food Security call (2016 – 2017)

Topic Title		Instrument	Comments
SFS - 33.	[2016]: Understanding agro-food value chain and network dynamics	RIA	2 stages
SFS - 34.	[2017]: Innovative agro-food chains: unlocking the competitiveness and sustainability potential	RIA	2 stages; multi-actor approach
SFS - 35.	[2016] Innovative solutions for sustainable food packaging	IA	2 stages
SFS - 36.	[2017] Natural foods with clean labels	IA	



Topics Sustainable Food Security call (2016 – 2017)

Topic Title	Instrument	Comments
SFS - 37. [2017]: Co-fund on "One Health" (zoonoses – emerging threats)	European Joint programme Cofund	
SFS - 38. [2016] Encouraging healthy and sustainable dietary choices and healthy lifestyles at early ages and measuring their impacts on health	RIA	2 stages
SFS - 39. [2017] The impact of consumer practices in biological and chemical food safety: risks and mitigation strategies	RIA	2 stages
SFS - 40. [2016] Impulsivity and compulsivity and the link to nutrition, lifestyle and the socio-economic environment	RIA	2 stages
SFS - 41. [2017] How to tackle the obesity epidemic?	RIA	2 stages; international cooperation encouraged, in particular with US, New Zealand, Australia, Canada
SFS - 42. [2017] Sweeteners and sweetness enhancers	RIA	2 stages

Topics Sustainable Food Security call (2016 – 2017)

Implementation of the EU-Africa Partnership

Topic Title	Instrument	Comments
SFS - 43. [2016]: EU-Africa Research and Innovation partnership on food and nutrition security and sustainable agriculture	Eranet cofund	
SFS - 44. [2016] Achieving food and nutrition security in Africa: the role of innovation	RIA	2 stages; multi-actor approach
SFS - 45. [2017] Earth observation services for the monitoring of agricultural production in Africa	RIA	2 stages

Implementation of the EU-China FAB Flagship initiative

Topic Title	Instrument	Comments
SFS - 46. [2017] A joint plant breeding programme to decrease dependency of the EU and China on protein imports	RIA	2 stages
SFS - 47. [2017] Increase overall transparency of processed agro-food products	RIA	2 stages
SFS - 48. [2016] Alternative production system to address anti-microbial usage, animal welfare and the impact on health	RIA	2 stages
SFS - 49. [2016] Soil water resources management in the EU and China and its impact on agro-ecosystem functions	RIA	2 stages
SFS - 50. [2017] Resource-efficient urban agriculture for multiple benefits – Contribution to the EU-China Urbanisation Partnership	IA	2 stages
SFS - 51. [2016 or 2017]: Food systems and water resources for the development of inclusive, sustainable and healthy Euro-Mediterranean societies (PRIMA)	TBC	

Topics call for Blue Growth (2016-2017)

Topic Title	Instrument	Comments
BG-1-[2016]: Large-scale algae biomass integrated biorefineries	IA	
BG-2-[2016/2017]: High value-added specialised vessel concepts enabling more efficient servicing of emerging coastal and offshore activities	IA	
BG-3-[2016]: Multi-use of the oceans marine space, offshore and near-shore: compatibility, regulations, environmental and legal issues	CSA	
BG-4-[2017]: Multi-use of the oceans marine space, offshore and near-shore: Enabling technologies	IA	
BG-5-[2017]: ERANET COFUND on marine technologies	Eranet co-fund	



Topics call for Blue Growth (2016 – 2017)

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Topic Title	Instrument	Comments
BG-6-[2017]: Interaction between humans, oceans and seas: a strategic approach towards healthcare and wellbeing	CSA	
BG-7-[2017]: Blue green innovation for clean coasts and seas	IA	
BG-8-[2016]: Innovative sustainable solutions for improving the safety and dietary properties of seafood	IA	

Strengthening the European ocean observing, surveying and monitoring capability

Topic Title	Instrument	Comments
BG- 9- [2016]: Unified integrated Arctic Observing System	RIA	2 stages
BG-10-[2016]: Impact of Arctic changes on the weather and climate of the Northern Hemisphere	RIA	2 stages; Transatlantic Ocean Research Alliance
BG-11- [2017]: Climate impacts on Arctic ecosystems, resources, new economic activities	RIA	2 stages; Transatlantic Ocean Research Alliance
BG-12-[2016]: Towards an integrated Mediterranean Sea Observing System	RIA	2 stages; support to international agreements
BG-13- [2016]: Support to the BLUEMED Initiative: Coordination of marine and maritime research and innovation activities in the Mediterranean	CSA	

Topics Call for a rural renaissance (2016-2017)

Topic Title	Instrument	Comments
RUR - 1. [2016] - Consolidated policy framework and governance models for synergies in rural-urban linkages	RIA	2 stages; multi-actor approach
RUR - 2. [2017] – Coastal-rural interactions: enhancing synergies between land and sea-based activities	RIA	2 stages; multi-actor approach
RUR - 3. [2017]: Towards 2030: policies and decision tools for an integrated management of natural resources	RIA	2 stages
RUR - 4. [2016]: WATER FARMS – Improving farming and supply of drinking water	RIA	2 stages; multi-actor approach
RUR - 5. [2017] Novel public policies, business models and mechanisms for sustainable supply and payment of forest ecosystem services	IA	



Topics call for a rural renaissance (2016 – 2017)

Topic Title	Instrument	Comments
RUR - 6. [2016] Crop diversification systems for the delivery of food, feed, industrial products and ecosystems services: from farm benefits to value-chain organisation	RIA	2 stages; multi-actor approach
RUR - 7. [2016] Resource-efficient and profitable industrial crops on marginal lands	RIA	2 stages; multi-actor approach
RUR - 8. [2016] Demonstration of integrated logistics centres for food and non-food applications	IA	Multi-actor approach
RUR - 9. [2017] – Business models for modern rural economies	RIA	2 stages; multi-actor approach

Topics call for a rural renaissance (2016 – 2017)

Topic Title	Instrument	Comments
RUR - 10. [2016-2017] – Thematic Networks compiling knowledge ready for practice	CSA	multi-actor approach
RUR - 11. [2016]: On farm demonstrations: deepening farmer-to-farmer learning mechanisms	CSA	Multi-actor approach
RUR - 12. [2017]: Networking European farms to boost thematic knowledge exchanges and close the innovation gap	CSA	Multi-actor approach
RUR - 13. [2017] – Building a future science and education system fit to deliver to practice	RIA	2 stages; multi-actor approach
RUR - 14. [2016]: Advisor's role in functioning of AKIS and advisory policies boosting innovation in sustainable agriculture	RIA	2 stages; multi-actor approach
RUR - 15. [2016]: The benefits of working with others – fostering social capital in the farming sector	CSA	Multi-actor approach
RUR - 16. [2017]: Optimising interactive innovation project approaches and the delivery of EU policies to speed up innovation in rural areas	RIA	2 stages; multi-actor approach



Topics Call for the bio-based innovation for sustainable goods and services (2016-2017)

Topic Title	Instrument	Comments
BE - 1. [2016] Sustainability schemes for the bio-based economy	RIA	2 stages
BE – 2. [2017] Towards a methodology for the collection of statistical data on bio-based industries and bio-based products	RIA	2 stages
BE - 3. [2017] Adaptive tree breeding strategies and tools for forest production systems resilient to climate change and natural disturbances	RIA	2 stages
BE - 4. [2016] Bio-based products: Mobilisation and mutual learning action plan	CSA	Multi-actor approach
BE - 5. [2017] Bio-based industries regional dimension	CSA	
BE - 6. [2016] Life-cycle assessment of wood value chains and applications for the bioeconomy	RIA	2 stages



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Calendar

- 3rd Draft (final) will be available end of June / beginning of Jul
- End of September: publication of calls
- DDL First stage 02/03/2016; second stage 14/09/16



Bio-Based Initiative – 2015 Call for proposals

- Calls for **flagship projects** launched on May 19th, DDL September 2015. Other calls (for research projects and innovation actions) to be published soon.
- Further information: See <http://www.bbi-europe.eu/participate/calls-proposals>
- H2020 participant portal:
<http://ec.europa.eu/research/participants/portal4/desktop/en/opportunities/h2020/calls/h2020-bbi-ppp-2015-1-1.html>



About ERANet-LAC

General objectives:

Supporting the implementation of the **Joint Initiative for Research and Innovation JIRI** and strengthening the bi-regional partnership in Science, Technology and Innovation by planning and implementing concrete joint activities and by establishing an innovative and sustainable framework for future bi-regional **joint activities**.

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ERANet-LAC 1st Joint Call

- The topic recommendations for the joint calls were prepared by the 5 thematic SOM WG and endorsed by the EU-CELAC SOM.
- **Topics:** For the 1st JOINT CALL, the participating funding agencies selected 6 topics in the thematic fields **Energy, Bioeconomy, Biodiversity/Climate Change, Health.**
- **Open:** September 16th – November 27th 2014
- **Participating funding agencies:** 20 partners from 17 EU-CELAC countries
- **Total commitments:** 11.4 million Euros



2nd Joint Call – Important Data

- **Date of publication:** In the beginning of December 2015
- **Topics:** Are presently being defined considering the topics prepared by the SOM WGs and endorsed by the EU-CELAC SOM in April 2014 on the basis of the funding agencies' thematic preferences.
- Bioeconomy SOM WG will present for the 2nd Joint Call topics on the following selected areas: *(will be discussed during the 2nd part of this meeting)*
 - **Biorefinery**
 - **Eco Intensification**
 - **Biotechnology**

Topics

BIOTECHNOLOGY

- Energetic crops: genetic improvement and efficient use of resources
- Artificial seeds for wood production
- Design and screening for multipurpose crops

ECO INTENSIFICATION

- Integral crop protection: Agricultural diversity
- Crops productivity and stability
- Integrated pest management

BIOREFINARY & BIO PRODUCTS

- Valorization of agro-industrial and urban residues at current biomass processing and consumption sites. Biorefinery of wet biomass – energy efficient processing
- Lignocellulosic biorefinery platform: production of high-value bio-based products
- Green Biorefinery: Energy intensification and new bioproducts from wet biomass

Many thanks