

HORIZON 2020



SC2 “Food Security, Sustainable Agriculture and Forestry, Marine, Maritime and Inland Water Research and the BIOECONOMY”

LEIT “BIOTECHNOLOGY”

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European Programmes Division*

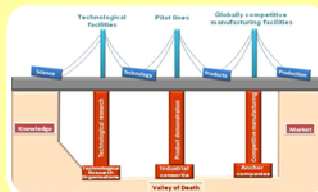
January 2014.

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Horizon 2020. Societal Challenge 2 - BIOECONOMY



Programa Marco de Investigación e Innovación (2014-2020)



Excellent Science

Industrial Leadership

Societal Challenges

European Research Council (ERC)

Future and Emerging Technologies (FET)

Marie Skłodowska-Curie actions on skills, training and career development

European research infrastructures

ICT

Nanotechnology

Biotechnology

Advanced Materials

Advanced Manufacturing & Processing

Space

Access to Risk Finance

Innovation in SMEs

Bio-based Industries Consortium

Health, demographic change and wellbeing

Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the Bioeconomy;

Secure, clean and efficient energy;

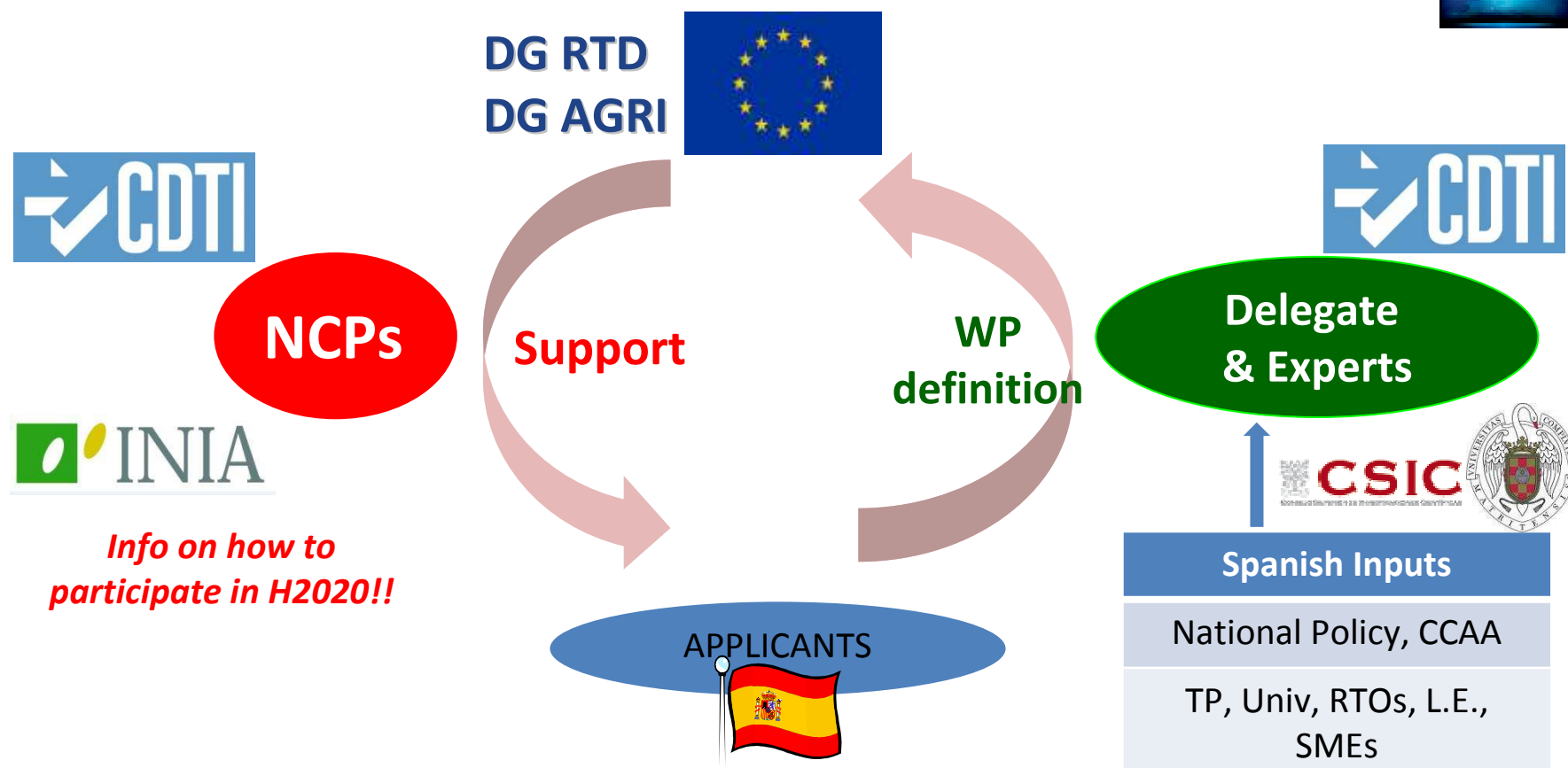
Smart, green and integrated transport;

Climate action, environment, resource efficiency and raw materials

Europe in a changing world-Inclusive, innovative and reflexive societies

Secure Societies: Protecting freedom and security of Europe and its citizens

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H2020 – Framework Programme for Research & Innovation



BUDGET

Excellent
Science

Industrial
Technologies

Societal
Challenges



HORIZONTE 2020

79.402

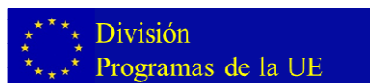
I. Prioridad «Ciencia excelente»

24.441

1. El Consejo Europeo de Investigación (CEI)

12.005

Horizon 2020 approval by Parliament (21 November)



4 / 72

(January 2014)

Ref.: H2020. Societal Challenge 2. January 2014.pptx



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HORIZON 2020 Vs. 7th Framework Programme (KBBE)



Food, Agriculture and Fisheries, and Biotechnology



*Building a European Knowledge Based Bio-Economy (KBBE) by bringing together science, industry and other stakeholders, to exploit new and emerging research opportunities that address social, environmental and economic challenges: the growing demand for **safer, healthier, higher quality food** and for sustainable use and **production of renewable bioresources**; the increasing risk of **epizootic and zoonotic diseases** and **food related disorders**; threats to the sustainability and security of **agricultural, aquaculture and fisheries production**; and the increasing demand for **high quality food**, taking into account animal welfare and rural and coastal context and response to specific **dietary needs of consumers**.*

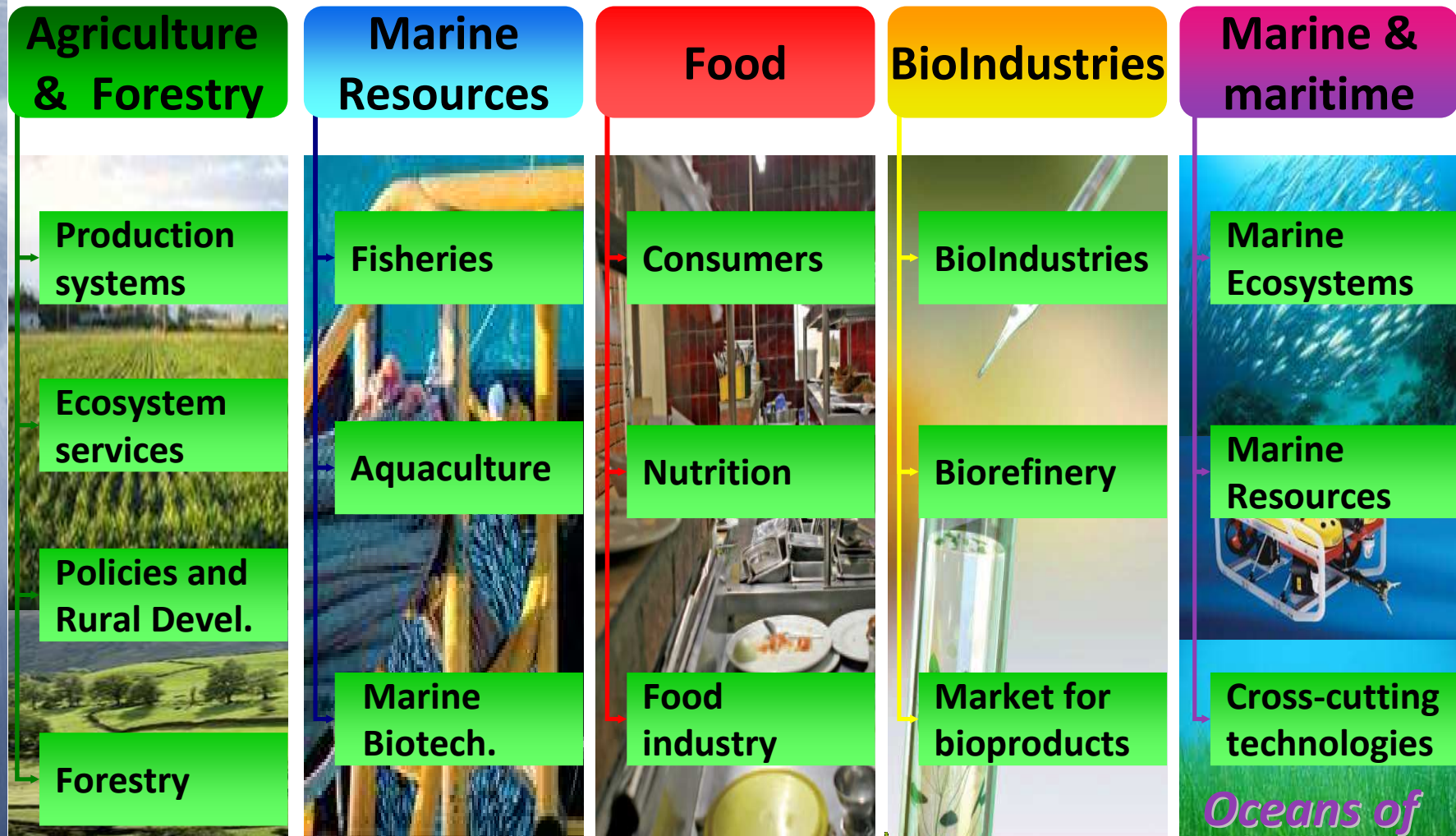
EU Bioeconomy Challenge:



The specific objective is to **secure sufficient supplies of safe, healthy and high quality food and other bio-based products**, by developing productive, sustainable and resource-efficient **primary production systems**, fostering related **ecosystem services** and the recovery of biological diversity, alongside competitive and low carbon supply, processing and marketing chains. This will accelerate the transition to a sustainable European Bioeconomy, bridging the gap between new technologies and their implementation.

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SC2 - BIOECONOMY – Structure and Contents

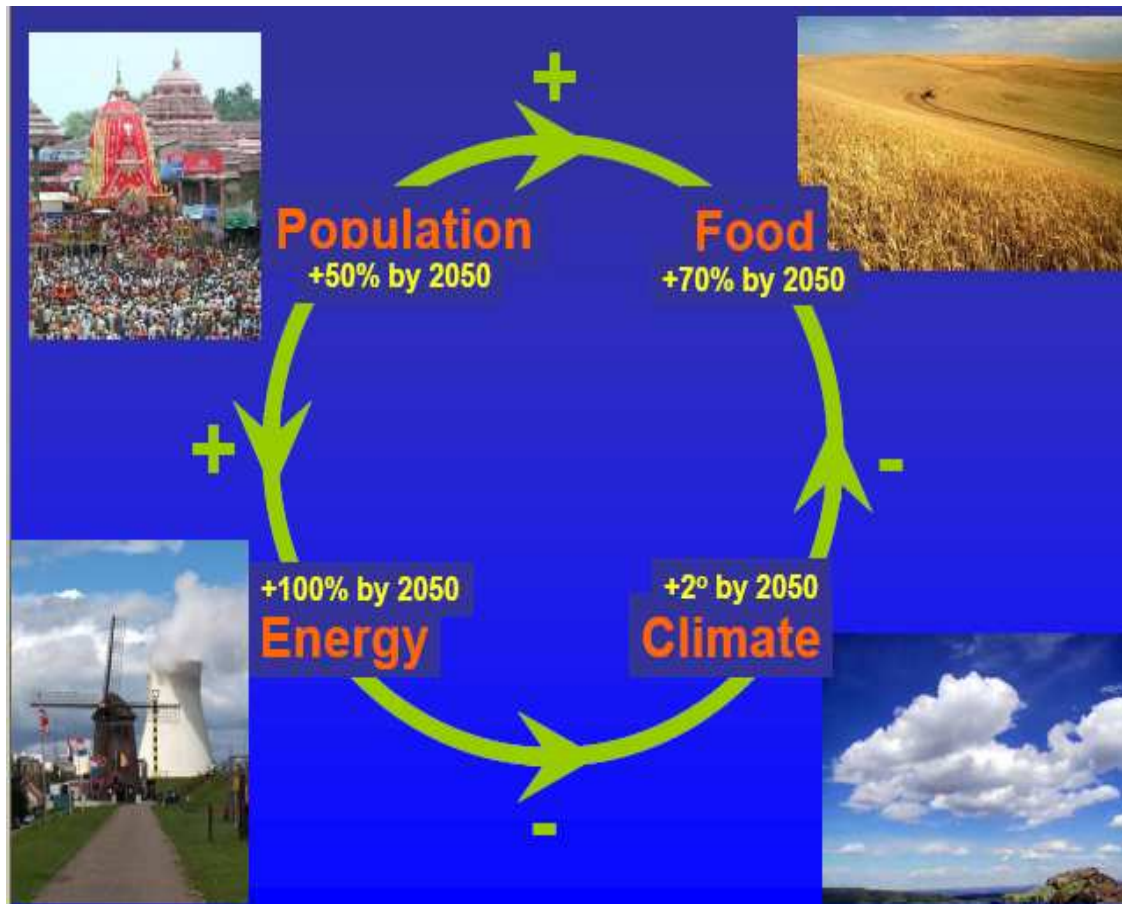


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SC2 - BIOECONOMY – Grand Challenge



Addressing “GRAND CHALLENGES”.



Fuente: Patrick Cunningham, KBBE Conference Brussels 14th September 2010
José María Sumpsi, "Los retos de la agricultura para alimentar al mundo en 2050".



- **KBBE-NET**
- **BIOECONOMY PANEL**
- **BIOECONOMY-OBSERVATORY**

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SC2 - BIOECONOMY – Structure and Contents



Agriculture & Forestry

Production systems

Ecosystem services

Policies and Rural Develop

Forestry

Increasing production efficiency, climate change, sustainability and resilience

- Adaptive capacity of plants, animals and production systems
- Use of biomass and by-products from agriculture and forestry for non-food app.
- Efficient resource use (water, nutrients, energy) & ecological integrity of rural areas.
- Genetic improvement of plants and animals for adaptation and productivity traits.
- On-farm soil management for increasing soil fertility as a basis for crop productivity.
- Animal and plant health, integrated disease/pest control measures
- Eradication of animal diseases, research on antimicrobial resistance, animal welfare.

Providing ecosystem services and public goods

- Delivering commercial products and societal public goods (including cultural and recreational value) and important ecological services (biodiversity, pollination, water regulation, landscape, erosion reduction & carbon sequestration / GHG mitigation).
- Management solutions, decision-support tools. Management of agricultural systems

Empowerment of rural areas, support to policies and rural innovation

- Development opportunities for rural communities (primary production and delivery of eco-systems services, new & diversified products (food, feed, materials, energy))
- Cohesion of rural areas and prevent economic and social marginalisation, foster diversification of economic activities (including service sector),
- Support policy makers in the implementation of relevant strategies, policies & legislation
- Socio-economic and comparative assessment of farming/forestry systems

Sustainable forestry

- Sustainable produce bio-based products and sufficient biomass.
- Consideration of economic, ecological and social aspects.
- Resource efficient forestry systems. Forest resilience and biodiversity protection.

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SC2 - BIOECONOMY – Structure and Contents



Marine Resources

Fisheries

Aquaculture

Marine Biotechnology

Developing sustainable and environmentally-friendly fisheries

- In depth understanding of marine ecosystems (new insights, tools and models to improve understanding of what makes marine ecosystems healthy and productive)
- Evaluate & mitigate the impact of fisheries on marine ecosystem. (including deep sea).
- The socio-economic effects of management options will be measured.
- Effects and adaptation to environmental changes, including climate change.
- Research on the biology, genetic and dynamics of fish populations, on the role of key species in the ecosystems, on fishing activities
- Shared use of maritime space with other activities, in particular in the coastal zone, and its socio-economic impact will also be addressed.

Developing competitive European aquaculture

- Development of healthy, safe and competitive products
- Domestication of established species and diversification for new species
- Interactions between aquaculture and aquatic ecosystems, effects of climate change
- Sustainable production systems in inland, on the coastal zone and offshore.
- Understanding the social and economic dimensions of the sector to underpin cost and energy efficient production

Boosting marine innovation through biotechnology

- Discovery of new species and applications in the field of marine biotechnologies, which is foreseen to generate a 10 % annual growth for this sector.
- Explore and exploit marine biodiversity and aquatic biomass to bring new innovative processes, products and services on the markets with potential applications in sectors including chemical and material industries, pharmaceutical, fisheries and aquaculture, energy supply and cosmetic.

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SC2 - BIOECONOMY – Structure and Contents



Informed consumer choices

- Consumer preferences, attitudes, needs, behaviour, lifestyle and education.
- Communication between consumers and the food chain research community.
- Improve informed choice, sustainable consumption and their impacts on production, inclusive growth and quality of life, especially of vulnerable groups.

Healthy and safe foods and diets for all

- Nutritional needs and the impact of food on physiological functions, physical and mental performance.
- Links between diet, ageing, chronic diseases and disorders and dietary patterns.
- Dietary solutions and innovations leading to improvements in health and well-being.
- Chemical and microbial food and feed contamination, risks and exposures.
- Food safety innovations, improved risk communication tools

A sustainable and competitive agri- food industry

- Needs for the food and feed industry to cope with social, environmental, climate and economic change from local to global
- Food design, processing, packaging, process control, waste reduction, by-product valorisation and the safe disposal of animal by-products.
- Innovative and sustainable resource-efficient processes
- Diversified, safe, affordable and high quality products
- Traceability, logistics and services, socio-economic factors, the resilience of the food chain against environmental and climate risks
- Limitation of negative impacts of food chain activities and of changing diets and production systems on the environment.

Food

Consumers

Nutrition

Food industry

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SC2 - BIOECONOMY – Structure and Contents



Fostering the bio-economy for bio-based industries

- Major progress towards low carbon, resource efficient and sustainable industries.
- Discovery and exploitation of terrestrial and aquatic biological resources, minimising adverse environmental impacts.
- Potential trade-offs between the various uses of biomass.
- Development of bio-based products and biologically active compounds for industries and consumers with novel qualities, functionalities and improved sustainability.
- Maximise economic value of renewable resources, bio-waste and by-products through resource efficient processes (urban biowaste into agricultural inputs)

Developing integrated biorefineries

- Bioproducts, intermediates and bioenergy/biofuels (cascade approach)
- Technologies and strategies will be developed to assure the raw material supply.
- Types of biomass for use in second and third generation biorefineries, including forestry, biowaste and industrial by-products

Supporting market development for bio-based products and processes

- Demand-side measures will open new markets for biotechnology innovation. Standardisation (bio-based content, functionalities and biodegradability).
- Methodologies and approaches to life-cycle analysis need to be further developed and continuously adapted to scientific and industrial advances.
- Research activities supporting product and process standardisation and regulatory activities in the field of biotechnology are considered essential for supporting the creation of new markets and for realising trade opportunities.

Bio-Industries

BioIndustries

Biorefinery

Market for bioproducts

bridge 2020

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SC2 - BIOECONOMY – Structure and Contents



Climate change impact on marine ecosystems and maritime economy

- Understand the functioning of marine ecosystems, the interactions between oceans and the atmosphere.
- Increase the ability to assess the role of the oceans on climate and the impact of climate change and ocean acidification on marine ecosystems and coastal areas.

Develop the potential of marine resources through an integrated approach

- Boosting long-term, sustainable maritime growth and create synergies across all the maritime sectors requires an integrated approach.
- Research activities will focus on preserving the marine environment as well as the impact of maritime activities and products on non-maritime sectors.
- Advances in the field of eco-innovation (new products, processes and the application of management concepts, tools and measures) to assess and mitigate the impact of human pressures on the marine environment.
- Towards a sustainable management of maritime activities.

Cross-cutting concepts and technologies enabling maritime growth

- Develop platform technologies (eg. genomics, meta-genomics, proteomics, molecular tools)
- Cross-cutting enabling technologies (e.g. ICT, electronics, nanomaterials, alloys, biotechnologies, etc.) and new developments and concepts in engineering.
- Marine & maritime research & ocean observation (deep-sea research, observing systems, sensors, automated systems for monitoring of activities and surveillance, screening marine biodiversity, marine geohazards, Remotely Operated Vehicles...)
- Reduce the impact on the marine environment (underwater noise, invasive species and pollutants) and minimise the carbon foot-print of human activities.
- Cross-cutting enabling technologies will underpin the implementation of marine and maritime Union policies.

Marine and maritime R.

Marine Ecosystems

Marine Resources

Cross-cutting technologies

Oceans of

Tomorrow

CDTI Centro para el Desarrollo Tecnológico Industrial

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WORK PROGRAMME DEFINITION. **TIMELINE**



2014	2015	2016	2017	2018	2019	2020
Strategic Programme						
Work Programme 1		Strategic Programme				
		WP 2 (+ 2018 info?)		Strategic Programme		
				WP 3 (+ 2020 info?)		WP 4

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WORK PROGRAMME DEFINITION. TIMELINE



2013	2014	2015	2016	2017	2018	2019	2020
Draft SP	Strategic Programme 1						
Draft WP1	Work Programme 1						
		Draft SP2	Strategic Programme 2				
Inputs WP2		Draft WP2	WP 2 (+ 2018 info?)				
				Draft SP3	Strategic Programme 3		
Inputs WP3				Draft WP3	WP 3 (+ 2020 info?)		
					Inputs WP4	Draft WP4	WP 4

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WORK PROGRAMME DEFINITION. SOURCES & INPUTS



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WORK PROGRAMME DEFINITION. SOURCES & INPUTS: EIP Agro



EIP AGRO – Areas of Innovative Actions:

- Increased agricultural productivity, output, & resource efficiency
- Innovation in support of the bio-based economy
- Biodiversity, Ecosystem services, and soil functionality
- Innovative products and services for the integrated supply chain
- Food quality, food safety and healthy lifestyles

EIP AGRO – Focus Groups:

- Genetic resources
- Organic matter content of soils
- Integrated pest management (IPM) in Brassica spp
- Organic farming - optimising arable yields
- Protein crops
- Reduction of antibiotics in the pig sector

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WORK PROGRAMME DEFINITION. MAIN FEATURES



- Biennial WP for 2014 and 2015 (486 M€)
- Three calls addressing some Focus Areas:
 - Sustainable Food Security (2014: 18 topics, 138M€; 2015: 12 topics, 110.5 M€)
 - Blue Growth (Seas and Oceans) (2014: 12 topics, 100M€; 2015: 5 topics, 45 M€)
 - Innovat. Sust. Inclusive Bioec. (2014: 10 topics, 44,5M€; 2015: 4 topics, 27 M€)
- Topics are framed in the context of overall H2020 approach:
more general, less prescriptive, larger scope, fewer topics; strong emphasis on expected impact; possible funding +1ppt; strong challenge-based approach, allowing applicants to have considerable freedom to come up with innovative solutions
- Strong innovation and market driven approach
- Multiactor approach: – involvement end users. Role of EIP AGRO
- Type of actions: R&I; Innovation; SMEs inst.; CSA; prizes; FTI?

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WORK PROGRAMME DEFINITION. STRATEGIC PROGRAMMING



- **Strategic programming identifies focus areas, each covered by a specific call, that:**
 - Bring together activities from **different challenges and enabling technologies**
 - Provide **support across the innovation chain** from research, to development, to proof of concept, piloting, demonstration projects, and to setting standards and policy frameworks.
 - Make use of the **full spectrum of funding schemes** and types of action e.g. research and innovation actions, innovation actions, ERANets, SME instrument...
 - **Integrate different perspectives**, including from the social sciences and humanities, gender perspectives, and international strategy

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WORK PROGRAMME DEFINITION. FOCUS AREAS



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WORK PROGRAMME DEFINITION. TOPICS



Topic structure reflects the challenge based approach.

Key features:

- **Specific Challenge:** Sets the context, the problem to be addressed, why intervention is necessary
- **Scope:** delineates the problem, specifies the focus and the boundaries of the potential action BUT without overly describing specific approaches
- **Expected Impact:** describes the key elements of what is expected to be achieved in relation to the specific challenge
- **Type of action:** R&I; Innov.; CSAs; SME instrument; Prizes; FTI
- **EC contribution:** A range is suggested by EC; ***Financial support to Third Parties*** is also possible under specific topics.

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WORK PROGRAMME DEFINITION.



Societal Challenge 2, Specific Programme Vs. Strategic Programme

- 2.1 **Productivity and resource base in agriculture, public goods, forestry, policies, rural development**
- 2.2 **Food quality/safety, food chain, consumer choices**
- 2.3 **Productivity and resource base in fisheries/aquaculture; marine biotechnology**
- 2.4 **Bio-based industries, biorefineries**
- 2.5 **Cross-cutting marine and maritime research**



Focus Area: Food Security



Focus Area: Blue Growth



General Call: ISIB

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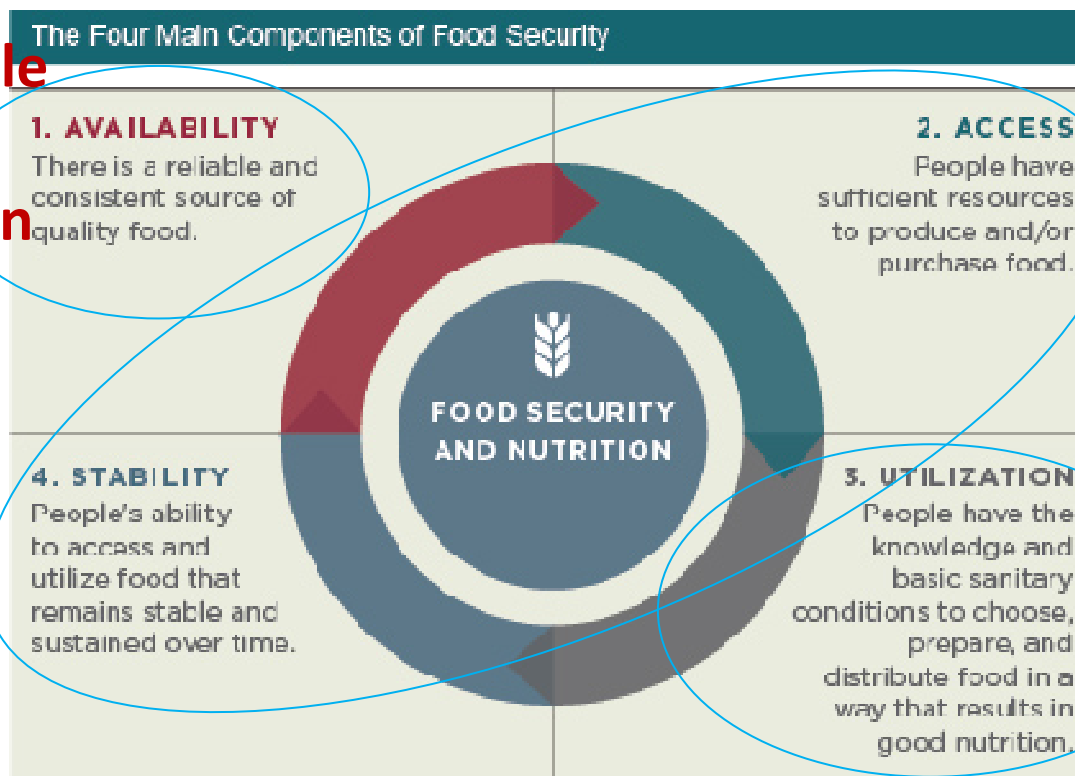
CALL FOR SUSTAINABLE FOOD SECURITY



Approach to Sustainable Food Security

**Sustainable
Food
Production
Systems**

**Global
drivers of
food security**



**Safe foods,
healthy
diets,
sustainable
consumption**

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CALL FOR SUSTAINABLE FOOD SECURITY



Area / Topic	WP 2014	WP 2015	Type of action	M€ EC contribution (suggested)	Budget		Evaluation procedure	
					2014	2015		
Sustainable food production systems								
SFS-1: Sustainable terrestrial livestock production					27		2 stages	
A. GENETICS and NUTRITION and alternative feed sources for terrestrial livestock production	X		R&I	7-9				
B. Tackling losses from terrestrial ANIMAL DISEASES	X		R&I	7-9				
C. Assessing sustainability of terrestrial livestock production		X	R&I	5-7		7		
SFS-2: Sustainable crop production					25			
A. EXTERNAL NUTRIENT inputs	X		R&I	8				
B. Assessing soil-improving cropping systems		X	R&I	9		9		
SFS-3: Practical solutions for native and alien pests affecting plants								
A. Native and alien PESTS in agriculture and forestry	X		R&I	7				
B. EU-China cooperation on IPM in agriculture	X		R&I	3				
SFS-4: SOIL quality and function	X		R&I	3-5	10			
SFS-5: Strategies for crop productivity, stability and quality		X	R&I	3-5		15		
SFS-6: Sustainable intensification pathways of agro-food systems in Africa	X		CSA	1	1			
SFS-7: Genetic resources and agricultural diversity for food security, productivity and resilience							2 stages	
A. Traditional resources for AGRICULTURAL DIVERSITY and the food chain	X		R&I	3-4	10			
B. Management and sustainable use of GENETIC RESOURCES		X	R&I	5-7		20		

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CALL FOR SUSTAINABLE FOOD SECURITY



Area / Topic	WP 2014	WP 2015	Type of action	M€ EC contribution (suggested)	Budget		Evaluation procedure
					2014	2015	
<i>Sustainable food production systems</i>							
SFS-8: Resource-efficient eco-innovative food production and processing	X	X	SME	P1: 0,05; P2: 0,5-2,5	9	17	3 phases
SFS-9: Towards a gradual elimination of DISCARDS in European fisheries	X		R&I	5	20	11,5	2 stages
SFS-10: Tackling disease related challenges and threats faced by European farmed aquatic animals							
A. Scientific basis and tools for preventing and mitigating PARASITIC DISEASES of European farmed fish	X		R&I	7			
B. Scientific basis and tools for preventing and mitigating farmed MOLLUSC DISEASES		X	R&I	4			
SFS-11: Implementation of an Ecosystem-based approach for European aquaculture							
A. Optimizing SPACE AVAILABILITY for European Aquaculture	X		R&I	3			
B. Consolidating the ENVIRONMENTAL SUSTAINABILITY of European aquaculture		X	R&I	7,5			

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CALL FOR SUSTAINABLE FOOD SECURITY



Area / Topic	WP 2014	WP 2015	Type of action	M€ EC contribution (suggested)	Budget		Evaluation procedure
					2014	2015	
Safe food and healthy diets and sustainable consumption							
SFS-12: Assessing the health risks of combined human exposure to multiple FOOD-RELATED TOXIC SUBSTANCES	X		R&I	8	17		2 stages
SFS-15: PROTEINS of the future	X		R&I	9			
SFS-13: BIOLOGICAL CONTAMINATION of crops & the food chain		X	R&I	3-5		10	
SFS-14: Authentication of food products							
A. Authentication of OLIVE OIL	X		R&I	5	5		single stage
B. Authentication of FOOD PRODUCTS		X	CSA	0,5		0,5	
SFS-16: Tackling MALNUTRITION in the ELDERLY		X	R&I	9		9	2 stages
SFS-17: Innovative solutions for sustainable NOVEL FOOD PROCESSING	X		Innov.	2	4		
Global drivers of food security							
SFS-18: Small farms but global markets: the role of SMALL and FAMILY FARMS in food and nutrition security		X	R&I	4-5		4,5	2 stages
SFS-19: Sustainable food and nutrition security through evidence based EU agro-food policies					10		
A. Strengthening the analytical capacity on food and nutrition security	X		R&I	5			
B. Understanding relevant issues impacting the agro-food sector	X		R&I	5			
SFS-20: Sustainable food chains through public policies: the cases of the EU quality policy and of public sector food procurement		X	R&I	7		7	pro para el

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Call for **BLUE GROWTH**: Unlocking the Potential of Seas & Oceans



Cross-cutting Marine & Maritime research in Horizon 2020

- The objective is to address **wide and complex ocean challenges which are cross-cutting in nature** ("The Ocean of Tomorrow" legacy)
- **Links across several Societal Challenges** (Bioeconomy (SC2), Environment (SC5), Transport (SC4), Energy (SC3) and other **pillars** of H2020 (Leading and Enabling Industrial leadership, Excellent Science)
- Addressed in the Focus area "**Blue Growth**"

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Call for **BLUE GROWTH**: Unlocking the Potential of Seas & Oceans



Criteria for topics to be included in BLUE GROWTH:

- 1/ High potential for **innovation** and growth
- 2/ Genuinely **cross-cutting** approaches
- 3/ Support across the **innovation chain** from research, to development
- 4/ Support to Policy: **Blue Growth agenda, IMP, Marine Strategy Framework Directive**
- 5/ Cross-cutting marine identified as a **new activity 2.5 in SC2 Specific programme**



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Call for **BLUE GROWTH**: Unlocking the Potential of Seas & Oceans

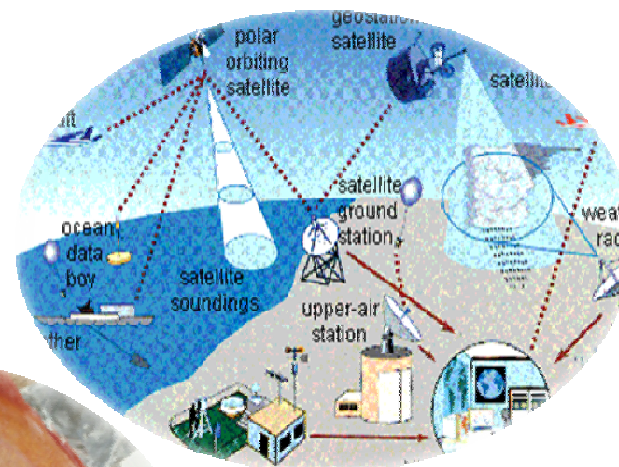
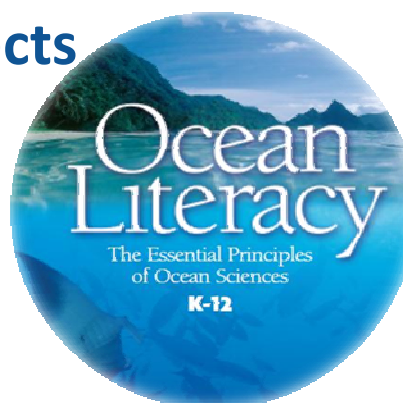


AREA 1: Sustainably exploiting the diversity of marine life

AREA 2: New offshore challenge

AREA 3: Ocean observations systems and technologies

AREA 4: Horizontal aspects



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Call for BLUE GROWTH: Unlocking the Potential of Seas & Oceans



International Cooperation: The Atlantic Ocean Research Alliance:

Launched in May 2013 (Galway Statement) under Irish Presidency with Commissioners Geoghegan-Quinn & Damanaki

Goal: To better understand the **Atlantic Ocean** and to promote the sustainable management of its resources. The work will also study the interplay of the Atlantic Ocean with the Arctic Ocean, particularly with regards to climate change.

In WP 2014-2015: Several topics are identified as relevant for the Galway Statement.

Participation of USA & Canada are encouraged but not exclusive

Horizon 2020. Societal Challenge 2 - BIOECONOMY

Call for **BLUE GROWTH**: Unlocking the Potential of Seas & Oceans



Area / Topic	WP 2014	WP 2015	Type of action	M€ EC contribution (suggested)	Budget		Evaluation procedure
					2014	2015	
<i>Sustainable exploiting the diversity of marine life</i>							
BG-1-2015: Improving the preservation and sustainable exploitation of ATLANTIC MARINE ECOSYSTEMS		X	R&I	8-12		20	2 stages
BG-2-2015: Forecasting and anticipating EFFECTS OF CLIMATE CHANGE on fisheries and aquaculture		X	R&I	5		10	
BG-3-2014: Novel marine derived BIOMOLECULES and industrial BIOMATERIALS	X		R&I	6-10	20		
BG-4-2014: Enhancing the industrial exploitation potential of marine-derived ENZYMES	X		R&I	6	6		
<i>New offshore challenges</i>							
BG-5-2014: Preparing for the FUTURE INNOVATIVE OFFSHORE ECONOMY	X		CSA	2	2		2 stages
BG-6-2014: Delivering the SUB-SEA TECHNOLOGIES for new services at sea	X		R&I	8-10	16		
BG-7-2015: Response capacities to OIL SPILLS and MARINE POLLUTIONS		X	R&I	4-6		8	

Horizon 2020. Societal Challenge 2 - BIOECONOMY

Call for **BLUE GROWTH**: Unlocking the Potential of Seas & Oceans



Area / Topic	WP 2014	WP 2015	Type of action	M€ EC contribution (suggested)	Budget		Evaluation procedure
					2014	2015	
<i>Ocean observation technologies/systems</i>							
BG-8-2014: Developing in-situ ATLANTIC OCEAN OBSERVATIONS for a better management and sustainable exploitation of the maritime resources	X		R&I	15-20	20		2 stages
BG-9-2014: ACOUSTIC and IMAGING TECHNOLOGIES	X		R&I	4-6	10		
<i>Horizontal aspects, socio-economic sciences, innovation, engagement with society and ocean governance across the blue growth focus area</i>							
BG-10-2014: Consolidating the economic sustainability and competitiveness of European fisheries and aquaculture sectors to reap the POTENTIAL OF SEAFOOD MARKETS	X		R&I	5	10		2 stages
BG-11-2014: Monitoring marine and maritime research, disseminating and valorising RESEARCH OUTPUTS	X		R&I	4	4		
BG-12-2014/2015: Supporting SMEs efforts for the development - deployment and market replication of innovative solutions for blue growth	X	X	SME	P1: 0,05; P2: 0,5-2,5	3	5	Single stage
BG-13-2014: OCEAN LITERACY – Engaging with society – Social Innovation	X		CSA	3,5	3,5		2 stages
BG-14-2014: Supporting flagship international cooperation initiatives: ATLANTIC OCEAN COOPERATION RESEARCH ALLIANCE	X		CSA	3,5	3,5		
BG-15-2014: European POLAR RESEARCH COOPERATION	X		CSA	2	2		
BG-16-2015: Coordination action in support of the implementation of the JPI on 'Healthy and Productive Seas and Oceans'		X	CSA	2		2	

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Call for Innovative, Sustainable & Inclusive BIOECONMY



ISIB Call

SC2 SPECIFIC PROGRAMME

Sustainable Agriculture and Forestry

Sustainable and Competitive agri-food sector for a safe and healthy diet

Unlocking the potential of aquatic living resources

Sustainable and competitive bio-based industries and supporting the development of a European bio-economy

Cross-cutting marine and maritime research

Horizontal actions

Sustainable Agriculture and Forestry

Sustainable and competitive bio-based industries

Cross-cutting actions covering all activities

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Call for Innovative, Sustainable & Inclusive BIOECONOMY



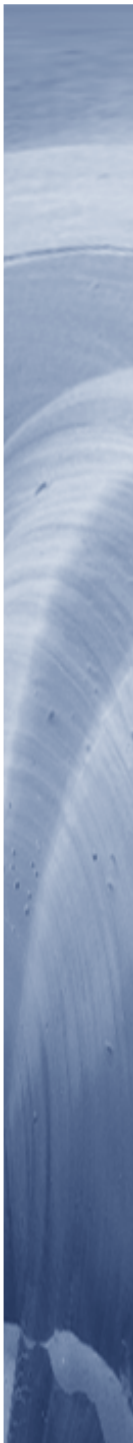
Area / Topic	WP 2014	WP 2015	Type of action	M€ EC contribution (suggested)	Budget		Evaluation procedure
					2014	2015	
Sustainable Agriculture and Forestry							
ISIB-1-2014: Provision of PUBLIC GOODS by EU agriculture and forestry : Putting the concept into practice	X		R&I	2-3	5		2 stages
ISIB-2-2014/2015: Closing the research and innovation divide: the crucial role of INNOVATION SUPPORT SERVICES and KNOWLEDGE EXCHANGE	X	X	CSA	2	10	10	Single Stage
ISIB-3-2015: Unlocking the growth POTENTIAL OF RURAL AREAS through enhanced governance and social innovation		X	R&I	6		6	2 stages
ISIB-4-2014/2015: Improved data and management models for sustainable forestry							
A. [2014] Improved FOREST DATA	X		R&I	5	5		2 stages
B. [2015] Improved FOREST MANAGEMENT MODELS		X	R&I	5		5	2 stages
Sustainable and competitive bio-based industries							
ISIB-5-2014: Renewable OIL CROPS as a source of bio-based products	X		R&I	10	10		2 stages
ISIB-6-2015: Converting CO2 into chemicals		X	R&I	6		6	2 stages
ISIB-7-2014: PUBLIC PROCUREMENT NETWORKS on innovative bio-based products	X		CSA	2	2		Single Stage

Horizon 2020. Societal Challenge 2 - BIOECONOMY

Call for Innovative, Sustainable & Inclusive BIOECONOMY



Area / Topic	WP 2014	WP 2015	Type of action	M€ EC contribution (suggested)	Budget		Evaluation procedure
					2014	2015	
<i>Cross-cutting actions covering all activities</i>							
ISIB-8-2014: Towards an innovative and responsible bioeconomy							Single Stage
A. Engaging society, reaching end users & linking with policy makers for a participative governance of the bioeconomy	X		CSA	1-2	3		
B. Bridging research and innovation efforts for a sustainable bioeconomy	X		CSA	1-2			
ISIB-9-2014: Supporting NCPs for Horizon 2020 SC2 ‘Bioeconomy’ and the KET ‘Biotechnology’	X		CSA	2	2		
ISIB-10-2014: Networking of Bioeconomy relevant ERA-NETs	X		CSA	0,5	2,5		
ISIB-11-2014: Coordination action in support of the implementation by participating States of a Joint Programming Initiative on Agriculture, Food Security and Climate Change	X		CSA	2			
ISIB-12-2015: Public-Public Partnerships in the bioeconomy			ERA- NET Cofund				
A. [2014] Sustainable and resilient agriculture for food and non-food systems	X			5			
B. [2015] Rural development		X			5	15	
C. [2015] Monitoring and mitigation of agricultural and forestry greenhouse gases (GHG)		X			5		
D. [2015] Sustainable crop production		X			5		
E. [2015] Sustainable livestock production		X			5		
F. [2015] Biomarkers for nutrition and health		X		5			



Lead. Enabling & Industrial Technologies. BIOTECHNOLOGY SETTING THE BASIS



- **Key enabling technologies and support to innovative SMEs to exit economic crisis**
- **Emphasis on R&D and innovation areas with strong industrial dimension.**
- **Activities primarily developed through relevant industrial roadmaps. (ETPs)**
- **Involvement of industrial participants and SMEs to maximise expected impact => evaluated in proposal !**

Lead. Enabling & Industrial Technologies. BIOTECHNOLOGY SETTING THE BASIS



Funded projects will be outcome oriented.

LEIT projects to develop key technology building blocks and bring them **closer to applications and market** to pave way for industrial and commercial implementation.

Proposal should describe:

- Exploitation and/or business plans
- Engagement of partners along industrial value chain
- Standardisation
- IPR
- Dissemination of know-how
- Support for education and training
- Expected impact

Lead. Enabling & Industrial Technologies. BIOTECHNOLOGY SETTING THE BASIS



Industrial mastering and deployment of Key Enabling Technologies (KETs). What are KETs?

- Six strategic technologies
- Driving competitiveness and growth opportunities
- Contributions to solving societal challenges
- Knowledge- and Capital-intensive
- Cut across many sectors

- **Nanotechnologies**
- **Advanced Materials**
- **Micro- and nano-electronics**
- **Photonics**
- **Biotechnology**
- **Advanced Manufacturing**

European KET Strategy:

- EC Comm. (2009)512 & (2012)341
- KET High-level Group

Lead. Enabling & Industrial Technologies. BIOTECHNOLOGY SETTING THE BASIS. BIOTECHNOLOGY - BACKGROUND



Biotechnology and EU's industrial leadership:

- Europe is the world leading producer of enzymes (75%)
- Europe is heading the implementation of Industrial Biotechnology (IB) for fine chemicals
- Nearly 70% of the IB's R&D expenditure by leading companies worldwide spent by European firms
- The potential contribution of IB to Gross Value Added to date is in the 50-60 billion € range globally; it is estimated to total to 300 billion € by 2030.

Lead. Enabling & Industrial Technologies. BIOTECHNOLOGY SETTING THE BASIS. BIOTECHNOLOGY - BACKGROUND



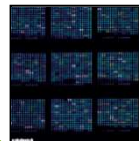
FP7 KBBE Biotech



Industrial biotechnology



Environmental biotechnology



Emerging trends in biotechnology



Novel sources of biomass and bioproducts



Marine and fresh-water biotechnology



Biorefinery

 **División
Programas de la UE**

H2020 LEIT Biotech



- **Biotechnology-based industrial processes**
- **Boosting cutting-edge biotechnologies as future innovation drivers**

- **Innovative and competitive platform technologies**

NEW



Societal Challenge 2

- **Food security, sustainable agriculture, marine and maritime research and the bioeconomy**

Lead. Enabling & Industrial Technologies. BIOTECHNOLOGY SETTING THE BASIS. BIOTECHNOLOGY WP 2014-2015



DRIVING FORCES FOR WP 2014-2015

Main policy priorities addressed in the WP

- *Industrial policy: Strengthening Europe's competitiveness, in particular in green growth, industrial productivity and innovation capacity*
- *Other policy/focus areas of relevance: blue growth, competitive low-carbon energy, energy efficiency, waste, water, personalised medicine*

Lead. Enabling & Industrial Technologies. BIOTECHNOLOGY SETTING THE BASIS. BIOTECHNOLOGY WP 2014-2015



DRIVING FORCES FOR WP 2014-2015

- **ETPs:** Strategic Research Agendas considered: Sustainable chemistry, Biofuels, Forest-based sector, Plants for the future, etc.
- **EC-US Task Force on Biotechnology Research**
- **OECD Working Party on Biotechnology**
- **Experts comments:** e.g. Ad-hoc experts meetings



Lead. Enabling & Industrial Technologies. BIOTECHNOLOGY SETTING THE BASIS. BIOTECHNOLOGY WP 2014-2015



MAIN FEATURES

Covering the innovation chain from research to market:

- From RTD to close to market topics

TRL levels: Balance between [3-5] and [5-7]

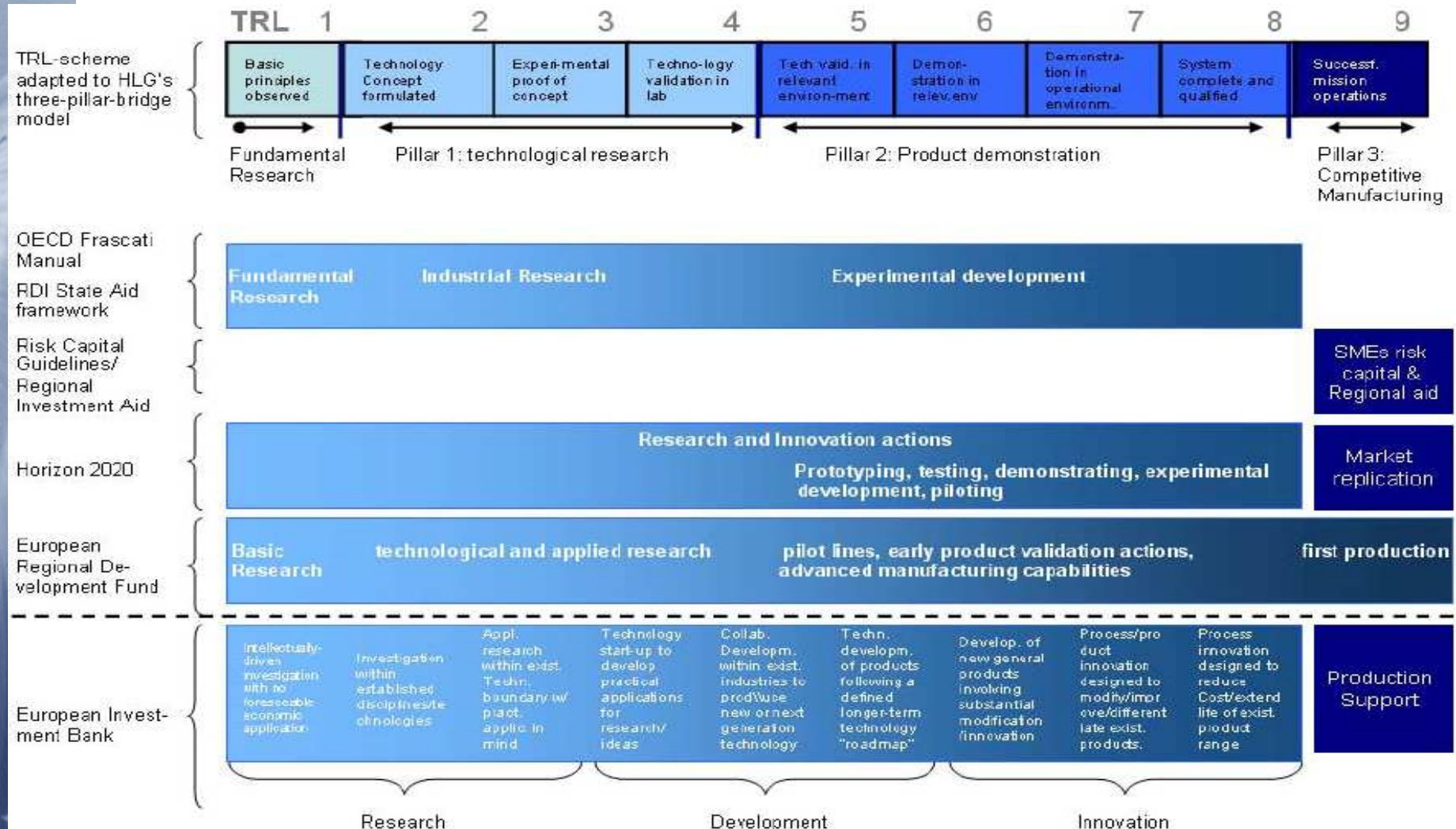
Larger share of high TRL expected in a later stage of H2020

- Cross cutting activities with **Bio-based industries JTI [SC2]**
- **Critical mass & Flexible approach:** Topics broad enough to allow one or several projects with complementary approaches to be financed
- All topics attractive to **SME**

Lead. Enabling & Industrial Technologies. BIOTECHNOLOGY SETTING THE BASIS. BIOTECHNOLOGY WP 2014-2015



Definitions and Criteria for R&D&I funding under EU policies and laws

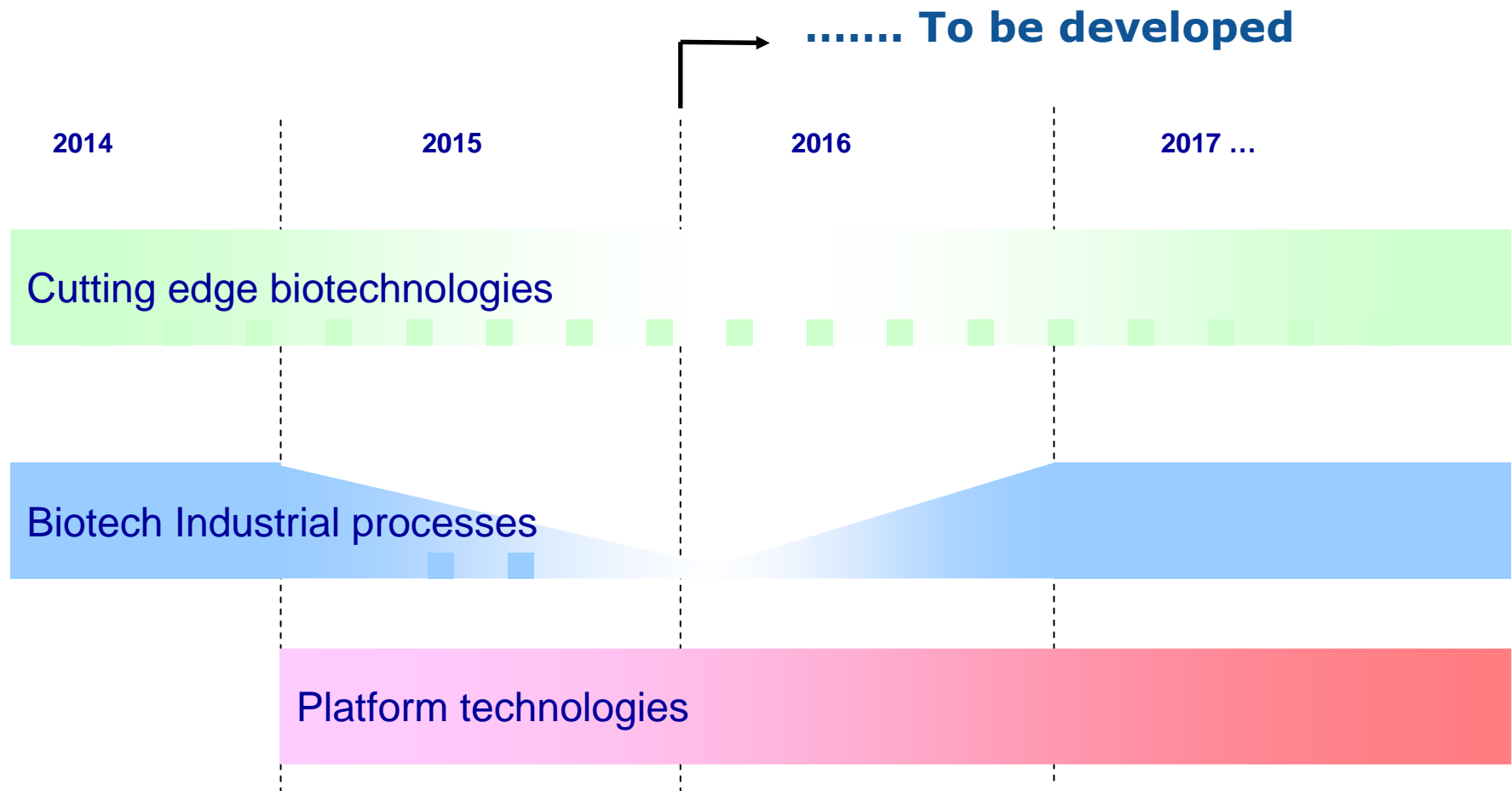


Lead. Enabling & Industrial Technologies. BIOTECHNOLOGY SETTING THE BASIS. BIOTECHNOLOGY WP 2014-2015



Area / Topic	WP 2014	WP 2015	Type of action	M€ EC contribution (suggested)	Budget		Evaluation procedure
					2014	2015	
<i>Cutting-edge biotechnologies as future innovation drivers</i>							
BIOTEC 1-2014: SYNTHETIC BIOLOGY - construction of organisms for new products and processes	X		R&I	6-10	18		2 stages
BIOTEC 2-2015: NEW BIOINFORMATICS approaches in service of biotechnology		X	R&I	6-10		29,6*	2 stages
<i>Biotechnology-based industrial processes driving competitiveness and sustainability</i>							
BIOTEC 3-2014: Widening INDUSTRIAL APPLICATION OF ENZYMATIC PROCESSES	X		Innov.	6-10	29,9		2 stages
BIOTEC 4-2014: Downstream processes unlocking BIOTECHNOLOGICAL TRANSFORMATIONS	X		Innov.	6-10			2 stages
BIOTEC 5-2014/2015: SME -boosting biotechnology-based industrial processes driving competitiveness and sustainability	X	X	SME	P1: 0,05; P2: 0,5-2,5	3,8	2,4	Single Stage
<i>Cross-cutting actions covering all activities</i>							
BIOTEC 6-2015: METAGENOMICS as innovation driver		X	R&I	6-10		29,6*	2 stages

Lead. Enabling & Industrial Technologies. BIOTECHNOLOGY SETTING THE BASIS. BIOTECHNOLOGY - TIMELINE



Lead. Enabling & Industrial Technologies. BIOTECHNOLOGY

PARTICIPATION IN H2020. NEXT STEPS



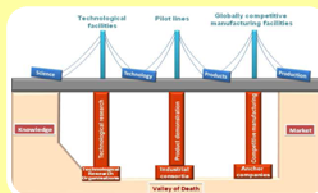
Don't miss these Dates:

- 22 November: Orientation Paper
- 11 December: Publication of WP
- 12 March: Deadline (1st stage)
- 26 June: Deadline (2nd stage and single stage)
- 10 December: Infoday at CDTI (*SC2 + Biotechnology*)
- 17 January: Infoday in Brussels (*presentations*)
- 7 February: Infoday at CDTI (*NMPB*)
- tbd*: *Meeting with NCP and Scientific Officer!*
- Specific dates for SME instrument*
- More events:**
 - Galicia (27.11), Córdoba (04.12), Zaragoza (13.01), Murcia (24.01), Pamplona (28.01), Valladolid (29.01), Vitoria (31.01), Valencia (04.02), Badajoz (12.02), Barcelona (19.02), CLM (tbc), GC (tbc), Madrid (tbc)...

Horizon 2020. Societal Challenge 2 - BIOECONOMY



Programa Marco de Investigación e Innovación (2014-2020)



Excellent Science

Industrial Leadership

Societal Challenges

European Research Council (ERC)

Future and Emerging Technologies (FET)

Marie Skłodowska-Curie actions on skills, training and career development

European research infrastructures

ICT

Nanotechnology

Biotechnology

Advanced Materials

Advanced Manufacturing & Processing

Space

Access to Risk Finance

Innovation in SMEs

Bio-based Industries Consortium

Health, demographic change and wellbeing

Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the Bioeconomy;

Secure, clean and efficient energy;

Smart, green and integrated transport;

Climate action, environment, resource efficiency and raw materials

Europe in a changing world-Inclusive, innovative and reflexive societies

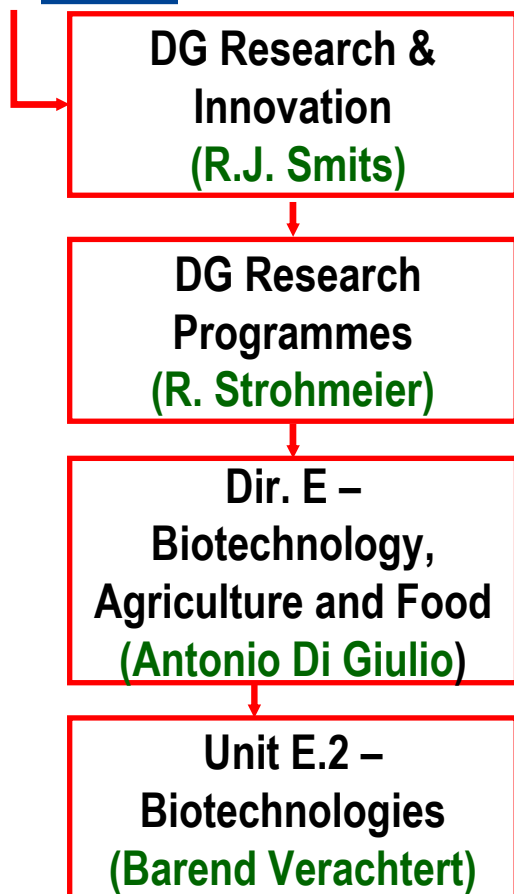
Secure Societies: Protecting freedom and security of Europe and its citizens

Horizon 2020. Societal Challenge 2 - BIOECONOMY

PPPs under SC2.- JTI on BioBased Industries: PROMOTERS.



European
Commission



europa
bioplastics

EUROPA BIO
The European Association for Bioindustries



SusChem
European Technology Platform For
SUSTAINABLE CHEMISTRY



Forest-Based Sector
Technology Platform



copa*cogeca
european farmers european agri-cooperatives



Horizon 2020. Societal Challenge 2 - BIOECONOMY

PPPs under SC2.- JTI on BioBased Industries: PROMOTERS.



WHO IS INVOLVED IN BBI? BIC PARTNERS (48 Ind + 68 Assoc)

□ Economic Sectors:

- Agricultural
- Agro-food
- Forestry
- Pulp and paper
- .../...

□ Leading companies in:

- Plant breeding
- Biotechnology
- Chemistry
- Energy
- Bioprocess engineering
- .../...

Horizon 2020. Societal Challenge 2 - BIOECONOMY

PPPs under SC2.- **JTI on BioBased Industries: PROMOTERS.**



WHO IS INVOLVED IN BBI? BIC PARTNERS (48 Ind + 68 Assoc)



Horizon 2020. Societal Challenge 2 - BIOECONOMY

PPPs under SC2.- JTI on BioBased Industries: BIOREFINERY.



BIOREFINERY CONCEPT

Biomass and organic waste

☐ Industrial side-streams:

Residues from the wood industry / saw mill

By-streams from biorefineries

Agro-industrial side-streams, partly now utilised as feed, other pre-consumer side-streams and waste streams

☐ Wood, recovered paper and side-streams from forestry, landscape, nature

☐ Agricultural residues (left on the land or burned)

☐ Agricultural crops

☐ Dedicated ligno-cellulosic / fibre crops

☐ New promising biomass sources (e.g. aquatic biomass)

☐ Process and waste water

☐ Municipal organic waste

☐ Agricultural surplus produced by the EU MMSS

☐ Animal manure



Bio-products & markets

☐ Biobased chemicals

☐ Bioplastics / biomaterials / packaging

☐ Advanced biofuels

☐ Specialties (Biosurfactants, lubricants, pharmaceuticals)

☐ Food ingredients and feed

☐ Bioenergy

☐ .../...

Horizon 2020. Societal Challenge 2 - BIOECONOMY

PPPs under SC2.- JTI on BioBased Industries: Value Chains.



BRIDGE. Value Chains.

1. From **lignocellulosic** feedstock to advanced biofuels, biobased chemicals and biomaterials: realising the feedstock and technology base for the next generation of fuels, chemicals and materials (**48% of budget**)
2. The next generation **forest-based value chains**: utilisation of the full potential of forestry biomass by improved mobilisation and realisation of new added value products and markets (**15% of budget**).
3. The next generation **agro-based value chains**: realising the highest sustainability and added value by improved agricultural production and new added value products and markets (**15% of budget**).
4. Emergence of **new value chains from (organic) waste**: From waste problems to economic opportunities by realising sustainable technologies to convert waste into valuable products (**15% of budget**).
5. The **integrated energy, pulp and chemicals biorefineries**: Realising sustainable bio-energy production, by backwards integration with bio-refinery operations isolating higher added value components (**7% of budget**).

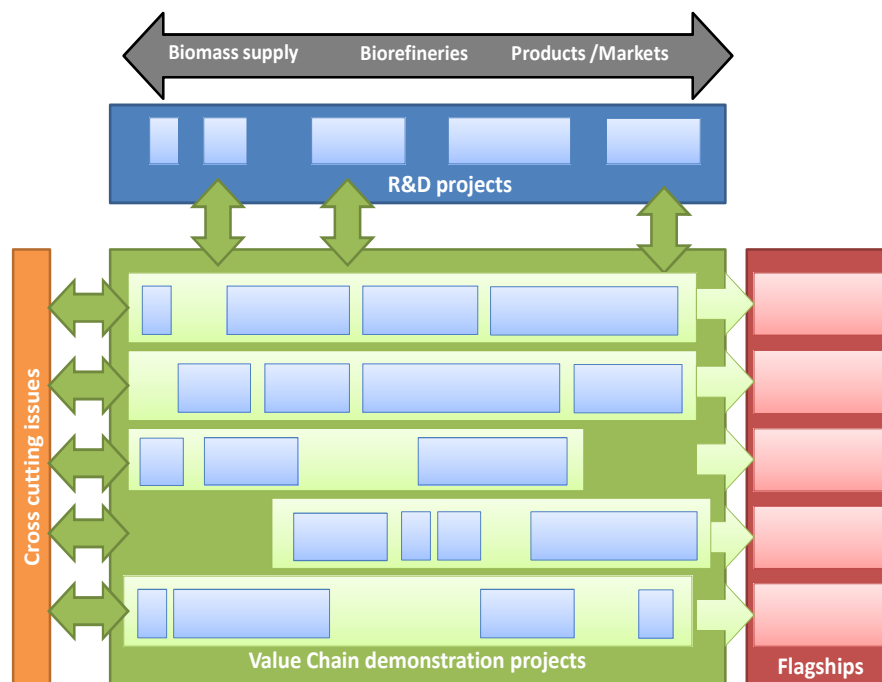
Horizon 2020. Societal Challenge 2 - BIOECONOMY

PPPs under SC2.- JTI on BioBased Industries: Value Chains.



BRIDGE. Value Chains.

The projects of the SIRA will be developed around **5 value chains**, where specific deliverables will be demonstrated, ultimately **leading to flagship projects**.



To have competitive biobased products in the market in 2020, each step of the value chains needs to be competitive:

- feedstock supply**,
- processing**,
- product and market** (both in term of price & environmental performance).

Horizon 2020. Societal Challenge 2 - BIOECONOMY

PPPs under SC2.- JTI on BioBased Industries: SIRA.



BRIDGE. Types of Projects.

The SIRA includes a balanced combination of:

- **Value chain demonstration projects** aiming towards integration and deployment of technologies and R&D results into actual value chains and bringing technology close to commercial scale through upscaling in demonstration activities and **flagship projects; (>65% of budget; at least 5 flagship projects)**
- **R&D projects** focused on filling the gaps in technological innovations: dedicated projects on the development of specific technologies and concepts needed to realise the value chains, and proving the principles in pilot installations; **(30% of budget; biomass supply 15%, biorefineries 60%, products and markets 25%)**
- **Supporting projects**, addressing the cross-sectorial challenges and supporting the value chains to become reality **(<5% of budget)**

Horizon 2020. Societal Challenge 2 - BIOECONOMY

CDTI's support. What, How, When



Horizon 2020. Societal Challenge 2 - BIOECONOMY

PARTICIPATION IN H2020. NEXT STEPS



Don't miss these Dates:

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- 17 January: Infoday in Brussels (*registration open*)
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- Specific dates for SME instrument*
- More events:**
 - Galicia (27.11); Córdoba (04.12); Zaragoza (13.01); Murcia (24.01);
 - Pamplona (28.01); Valladolid (29.01); Vitoria (31.01); Valencia (04.02);
 - Madrid (tbd); CLM (tbd)...

Horizon 2020. Societal Challenge 2 - BIOECONOMY

PROPOSAL TEMPLATE (Technical Annex). *For information*



1.- Excellence

1.1- Objectives

1.2- Relation to the work programme

1.3- Concept and approach

1.4- Ambition

2.- Impact

2.1- Expected impacts

2.2- Measures to maximise impact

a) Dissemination and exploitation of results

b) Communication activities

3.- Implementation

3.1- Work Plan – Work packages, deliverables and milestones

3.2- Management structure and procedures

3.3- Consortium as a whole

3.4- Resources to be committed

Section 4: Members of the Consortium

Section 5: Ethics and Security

In two-stage submission schemes, at the first stage you only need to complete the parts indicated in bold green (Cover page and sections 1 and 2)

Horizon 2020. Societal Challenge 2 - BIOECONOMY

WORK PROGRAMME DEFINITION. GENERAL ANNEXES



- A. List of **countries**, and applicable rules for funding
- B. Standard **admissibility conditions** for grant proposals, and related requirements
- C. Standard **eligibility criteria**
- D. **Types of action**: specific provisions and funding rates
- E. Specific requirements for innovation procurement (PCP/PPI)
- F. Rules of Contest (RoC) for Prizes
- G. Technology readiness levels (**TRL**)
- H. **Evaluation**
- I. Budget flexibility
- J. Classified Information
- K. Financial support to third parties

Horizon 2020. Societal Challenge 2 - BIOECONOMY

WORK PROGRAMME DEFINITION. **Admissibility Conditions**



B.- Standard admissibility conditions for grant proposals, and related requirements

1.- To be considered **admissible**, a proposal must be:

- Submitted in the EPSS before the deadline
- Readable, accessible and printable.

2.- Incomplete proposals may be considered inadmissible (administrative data, proposal description, supporting documents specified in the call).

Supporting documents required to **determine the operational capacity**: specified:

- A **curriculum vitae** or description of the profile of the persons...
- A list of up to **five relevant publications**, and/or products, services...
- A list of up to **five relevant previous projects**...
- A description of any significant **infrastructure** and/or any major items of **technical equipment**, relevant to the proposed work;
- A description of any **third parties**

3.- Proposals shall include a **draft plan for the exploitation and dissemination of the results**, (not required for proposals at the first stage of two-stage procedures).

4.- **Page limits** will apply to proposals. *(full prop: 70 pages; first stage prop: 15 pages)*

Horizon 2020. Societal Challenge 2 - BIOECONOMY

WORK PROGRAMME DEFINITION. Eligibility Criteria



C.- Standard eligibility criteria

	Eligibility conditions
Research & innovation action	<u>Three legal entities</u> . Each of the three shall be established in a different Member State or associated country. All three legal entities shall be independent of each other.
Innovation action	<u>Three legal entities</u> . Each of the three shall be established in a different Member State or associated country. All three legal entities shall be independent of each other
Coordination & support action	<u>One legal entity</u> established in a Member State or associated country.
SME instrument	<u>One for-profit SME</u> . Only applications from SMEs established in EU Member States or countries associated to Horizon 2020; <u>No concurrent submission or implementation</u> with another phase 1 or phase 2 project.

Horizon 2020. Societal Challenge 2 - BIOECONOMY

WORK PROGRAMME DEFINITION. Technology Readiness Level



G.- Technology readiness levels (TRL)

TRL 1 – basic principles observed

TRL 2 – technology concept formulated

TRL 3 – experimental proof of concept

TRL 4 – technology validated in lab

TRL 5 – technology validated in relevant environment (industrially relevant environment in the case of key enabling technologies)

TRL 6 – technology demonstrated in relevant environment (industrially relevant environment in the case of key enabling technologies)

TRL 7 – system prototype demonstration in operational environment

TRL 8 – system complete and qualified

TRL 9 – actual system proven in operational environment (competitive manufacturing in the case of key enabling technologies; or in space)

Horizon 2020. Societal Challenge 2 - BIOECONOMY

WORK PROGRAMME DEFINITION. Evaluation Criteria



H.- Evaluation

Selection Criteria

a)**Financial capacity:** In line with the Financial Regulation and the Rules for Participation. At the proposal stage, coordinators will be invited to *complete a self-assessment* using an on-line tool.

b)**Operational capacity:** As a distinct operation, carried out during the evaluation of the award criterion 'Quality and efficiency of the implementation', experts will indicate whether the participants meet the selection criterion related to operational capacity, to carry out the proposed work, *based on the competence and experience of the individual participant(s).*

Horizon 2020. Societal Challenge 2 - BIOECONOMY

WORK PROGRAMME DEFINITION. Evaluation Criteria



H.- Evaluation

Award Criteria

Type of action	Excellence	Impact	Quality and efficiency of the implementation
All types of action	<ul style="list-style-type: none"> Clarity and pertinence of the objectives; Credibility of the proposed approach. 	<ul style="list-style-type: none"> The expected impacts listed in the work programme under the relevant topic 	<ul style="list-style-type: none"> Coherence and effectiveness of the work plan, including appropriateness of the allocation of tasks and resources; Complementarity of the participants within the consortium (when relevant); Appropriateness of the management structures and procedures, including risk and innovation management.

() For the evaluation of first-stage proposals under a two-stage submission procedure, only the criteria 'excellence' & 'impact' will be evaluated (only the aspects in bold). Individual threshold: 4*

Horizon 2020. Societal Challenge 2 - BIOECONOMY

WORK PROGRAMME DEFINITION. Evaluation Criteria



H.- Evaluation

Type of action	Excellence	Impact	Implement.
<p>Research and innovation;</p> <p>Innovation;</p> <p>SME instrument</p>	<ul style="list-style-type: none"> • Soundness of the <u>concept</u>, including trans-disciplinary considerations, where relevant; • Extent that proposed work is <u>ambitious</u>, has <u>innovation potential</u>, and is <u>beyond the state of the art</u> (e.g. ground-breaking objectives, novel concepts and approaches) 	<ul style="list-style-type: none"> • Innovation capacity and integration of new knowledge; • Competitiveness and growth of companies • Any other environmental and socially important impacts; • Effectiveness of measures to exploit and disseminate the project results (management of IPR), to communicate the project, and to manage research data where relevant. 	

() For the evaluation of first-stage proposals under a two-stage submission procedure, only the criteria 'excellence' & 'impact' will be evaluated (only the aspects in bold). Individual threshold: 4*

Horizon 2020. Societal Challenge 2 - BIOECONOMY

WORK PROGRAMME DEFINITION. Evaluation Criteria



H.- Evaluation

Award Criteria

Type of action	Excellence	Impact	Implement.
Coordination & support actions	<ul style="list-style-type: none"> • Soundness of the <u>concept</u>; • <u>Quality</u> of the proposed coordination and/or support measures. 	<ul style="list-style-type: none"> • Effectiveness of the proposed measures to exploit and disseminate the project results (including management of IPR), to communicate the project, and to manage research data where relevant. 	

() For the evaluation of first-stage proposals under a two-stage submission procedure, only the criteria 'excellence' & 'impact' will be evaluated (only the aspects in bold). Individual threshold: 4*

Horizon 2020. Societal Challenge 2 - BIOECONOMY

WORK PROGRAMME DEFINITION. Evaluation Criteria



H.- Evaluation

Award Criteria

a) For full proposals, **each criterion will be scored out of 5**. The threshold for **individual criteria will be 3**. The **overall threshold**, applying to the sum of the three individual scores, **will be 10**.

b) For **Innovation actions and the SME instrument** (phases 1 and 2), to determine the ranking, the score for the criterion '**impact**' will be given a weight of **1.5**.

c) For the evaluation of **first-stage proposals** under a two-stage submission procedure, only the criteria '**excellence**' and '**impact**' will be evaluated. Within these criteria, only the aspects in bold will be considered. The threshold for both **individual criteria will be 4**.

Horizon 2020. Societal Challenge 2 - BIOECONOMY

WORK PROGRAMME DEFINITION. Evaluation Criteria



H.- Evaluation

Award Criteria - Priority order for proposals with the same score

i. Proposals that address **topics not otherwise covered** by more highly-ranked proposals, will be considered to have the highest priority.

ii. These proposals will themselves be prioritised according to the scores they have been awarded for the criterion **excellence**. When these scores are equal, priority will be based on scores for the criterion **impact**. In the case of **Innovation actions**, and the **SME instrument** (phases 1 and 2), this prioritisation will be done first on the basis of the score for **impact**, and then on that for **excellence**.

iii. Any further prioritisation will be based on:

- size of budget allocated to SMEs;
- gender balance among the personnel named in the proposal...
- Panel decision.

Horizon 2020. Societal Challenge 2 - BIOECONOMY

POINTS FOR GUIDING APPLICANTS. SOME REMARKS



- ☐ Elegir el **instrumento adecuado** (y su documentación)
- ☐ ¡No la fastidiemos con el **envío!**
- ☐ Cada medio punto: ¡CUENTA!
- ☐ Necesitamos puntuaciones altas en **todos los criterios...**y ponerse en el lugar del Evaluador
- ☐ Importancia del **Word**
- ☐ **CONTEXTO** muy importante en la preparación (estrategia, política, competidores, etc.) - **Conocer las fuentes del topic.**
- ☐ La **preparación** aumenta significativamente las posibilidades de éxito → 12 de marzo 2014 (**<50 Días**)
- ☐ Preparar las propuestas con **tiempo suficiente.**
- ☐ Usar toda la **ayuda disponible** (y a tiempo)

Horizon 2020. Societal Challenge 2 - BIOECONOMY

POINTS FOR GUIDING APPLICANTS. SOME REMARKS



- ☐ Contribuir a la **elaboración del WP**.
- ☐ Participar (aunque sea a distancia, pero activamente) en las **redes clave** de cada temática.
- ☐ Participar como **evaluador**.
- ☐ Seguir los **eventos informativos** en Bruselas y Madrid.
- ☐ Ajustarse al **programa de trabajo** y no al revés.
- ☐ Reflejar en el “**Project Workplan**” las promesas hechas a lo largo de la propuesta
- ☐ Cuidar en particular las **primeras páginas**: “ganarse al evaluador en 2 páginas”.
- ☐ **Contrastar la idea inicial y un borrador** de la propuesta con el *National Contact Point* y el *Scientific Officer*.



Thanks for your attention!

Any questions?

José Manuel González

Spanish Delegate to SC2 and National Contact Point for SC2 & LEIT "Biotech"

CDTI.

Ministry of Economy and Competitiveness

International Programmes Directorate

European Programmes Division

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