



EU support to research and innovation in biotechnology – H2020 SC2 + KET biotech

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Horizon 2020 – SC2



H2020 Societal Challenge 2 4 calls 2017

**Sustainable
food security**

**Blue
Growth**

**Rural
Renaissance**

**Bio-based
innovation
for
sustainable
goods and
services**



Sustainable food security - Topics 2017

Resilient, resource-efficient value chains

- **In-situ conservation – partnerships, tools (CSA)**
- **Robotics for precision farming (RIA)**
- **Organic breeding (RIA)**
- **Organic inputs (RIA)**
- **Emerging diseases in plants and livestock (RIA)**
- **Diagnostic tools for plant and animal health (IA)**
- **Breeding livestock for resilience and efficiency (RIA)**
- **Bee health, polination (RIA)**
- **Plant protection innovation (RIA)**
- **Eranet cofunds – bioeconomy**
- **Regionalisation of CFP (RIA)**
- **Fish and seafood – biological knowledge and management (RIA)**
- **Smart fisheries technologies (IA)**

EnvironmentCli mate-smart primary production

- **Permanent grassland – farming systems and policies (RIA)**
- **Functional biodiversity – interplay crop pollinators and crops predators (RIA)**
- **Socio-eco-economic – socio-economic in ecological approaches (RIA)**
- **Mitigation of GHG emissions and environmental contamination (RIA)**
- **Eco-intensification of aquaculture (including freshwater) (RIA)**

Sustainable food security - Topics 2017

Competitive food industry

- **Innovative agri-food chains – competitiveness and sustainability (RIA)**
- **Innovative solutions for sustainable food packaging (IA)**

Healthy food and diets for all

- **One Health co-fund (zoonoses)**
 - **Childhood obesity epidemics (RIA)**
 - **Sweeteners and sweetness enhancers (RIA)**
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Sustainable food security - Topics 2017

EU-Africa Partnership

- **Earth observation services for the monitoring of agricultural production in Africa (RIA)**

EU-China Flagship

- **Management of soil water resources in the EU and China, impact on agro-ecosystems (RIA)**
- **Livestock production and antimicrobial drug use, animal welfare and health (RIA)**
- **Resource efficient urban agriculture for multiple benefits (IA)**

Blue Growth - Topics 2017

Boosting innovation for emerging Blue Growth activities

- **Multi-use of the oceans marine space, offshore and near-shore (CSA)**
- **High-value added specialised vessel concepts (IA)**

Linking healthy oceans and seas with healthy people

- **Interaction between people, oceans and seas (CSA)**
- **Blue green innovation for clean coasts and seas (IA)**
- **Innovative sustainable solutions for improving the safety and dietary properties of seafood (IA)**

The Arctic Dimension

- **Climate impacts on Arctic permafrost and its socio-economic impact, with a focus on coastal areas (RIA)**

Valorising the Mediterranean Sea basin

Rural renaissance - Topics 2017

Policies and governance

- Coastal-rural interactions – enhancing synergies (RIA)
- Towards 2030 – policies and decision tools for managements of natural resources (RIA)
- Novel public policies and mechanisms for forest ecosystems services (IA)

New value chains and business models

- Business models for modern rural economies (RIA)

Innovation and skill development

- Thematic networks – knowledge to practice (CSA)
- Networking european farms – thematic knowledge exchange and closing innovation gap (CSA)
- Building future science and education systems to deliver to practice (RIA)
- Fostering social capital in the farming sector (CSA)
- Interactive innovation project delivery of EU policies to speed up innovation in rural areas (RIA)

Bio-based innovation – Topics 2017

Securing Sustainable biomass supply

- **Statistical data on bio based industries and bio based products (RIA)**
- **Tree breeding strategies and tools for forest production systems resilient to climatic change and natural disturbances (RIA)**

Building the bio- based markets of the future

- **Bio based products – mobilisation and mutual learning action plan (CSA)**



Bio-based Innovation for Sustainable Goods and Services CALL

Activities of H2020 call are complementary to the
Joint Technology Initiative on Bio-based Industries
2016-17 Indicative Budget €300 million,,



<http://www.bbi-europe.eu/>

JU BBI focus: feedstock (biomass supply), biorefineries, markets for biobased
products, policy frameworks



H2020 - SC2 Calls 2017

Opening	Submission		<u>Deadlines</u>
4 OCT 2016	two-stage submission (RIA with some exceptions)	1st stage	14 Feb 2017
		2nd stage	13 Sept 2017
	single stage submission (IA, CSA, ERA Net)	Single stage	14 Feb 2017

H2020 – KET - biotech





NMBP v H2020 BIOTECH topics 2017

- BIOTECH-5: Microbial platforms for CO₂-reuse processes in the low-carbon economy (RIA)
 - BIOTECH-6: Optimisation of bio-catalysis and downstream processing for the sustainable production of high added-value platform chemicals (IA)
 - BIOTECH-7: New Plant Breeding Techniques (NPBT) in molecular farming: Multipurpose crops for industrial bio-products (RIA)
 - BIOTECH-8: Support for enhancing and demonstrating the impact of KET Biotechnology projects (CSA)
 - *SME Instrument: Dedicated support to biotechnology SMEs closing the gap from lab to market*
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Výzvy BIOTEC 2017

Publication	Submission		<u>Deadlines</u>	Budget
10 May 2016	two-stage submission (RIA)	1st stage	27 Oct 2016	€ 48 M
		2nd stage	4 May 2017	
20 Sep 2016	single stage submission (CSA)	single stage	19 Jan 2017	
Continuous	SME Instrument			€ 7,5 M

Funding schemes

Excellent Science	Industrial leadership	Societal challenges
Research and innovation actions - RIA (100 %)		
Innovation actions – IA (70 %, non-profit 100 %)		
Coordination and support actions - CSA (100 %)		
ERC (100%)	Fast track to innovation (70 %)	
Marie Curie (unit costs)	SME instrument (lump sum + 70 %)	
	Risk capital	

Partner search

- H2020 – SC2 a KET biotech calls Brokerage event, Brussels 28.6.2016 (collaboration profiles and flash presentations available)
 - <https://www.b2match.eu/foodbrokerage2016>
- H2020 Blue Growth calls – conference and brokerage event Gdańsk 19.-20.9.2016
 - <https://www.b2match.eu/smartblue2016>
- Cordis partner search
 - <https://cordis.europa.eu/partners/web/guest/home>

WP 2018-2019 (20) STRATEGIC PROGRAMMING

- **Conferences**
 - **Global bioeconomy summit** (Berlin 2015),
 - **Bioeconomy investment summit** (Brusel 2015),
 - **A strategic approach to EU agricultural research and innovation** (Brussels 2016),
 - **European bioeconomy stakeholders conference** (Utrecht 2016),
 - **SK presidency Bioeconomy conference** (Bratislava, Oct 2016)
 - **Food research area strategy 2030** – (Brussels, Oct 2016)
- **EC Advisory group – report and recommendations 07/2016**
- **Standing Committee for Agricultural Research SCAR – foresight exercise - scenarios of future developments (2015)**
<http://ec.europa.eu/research/scar/index.cfm?pg=home>
- **Programme committee H2020 SC2 – EC Scoping paper**
- **Public consultation (closed 28.8.):** http://ec.europa.eu/research/consultations/sc2-wp2018-2020/consultation_en.htm

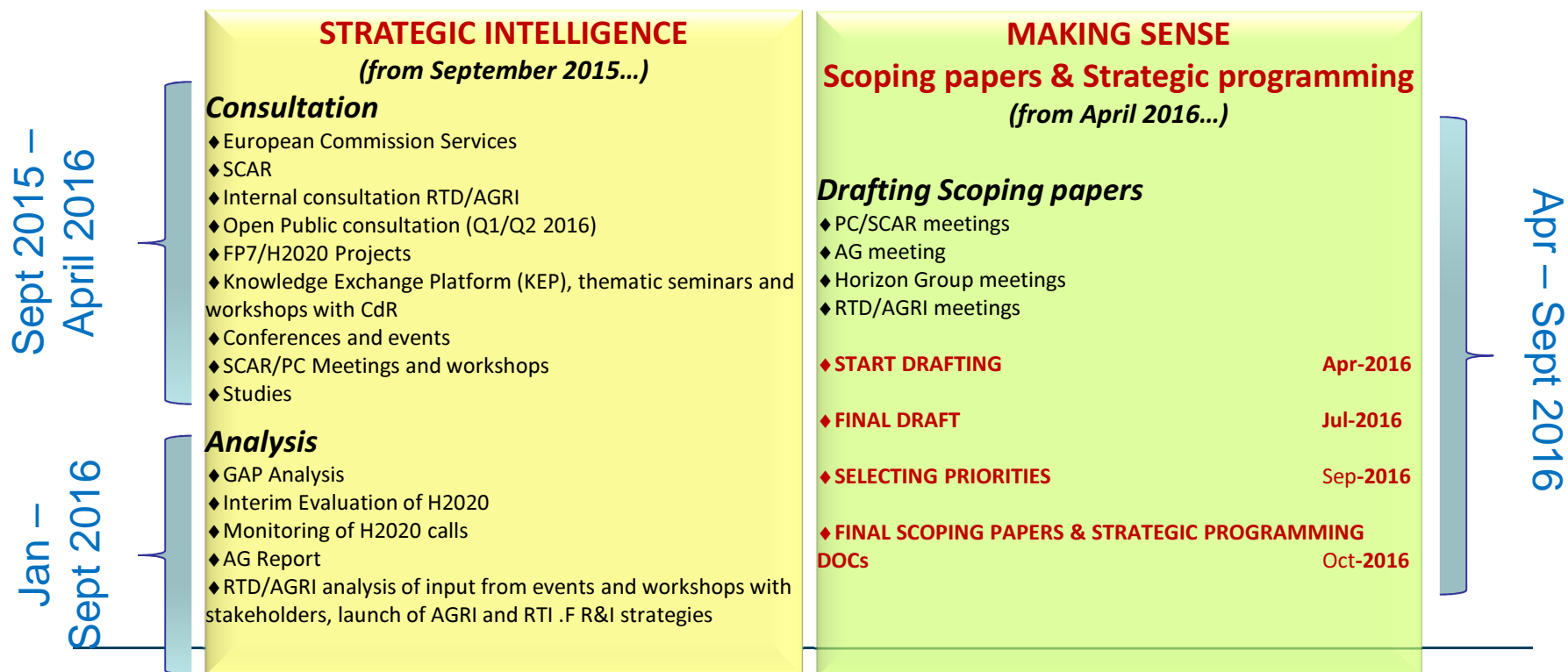
WP 2018-2019 (20)

- Joint working workshops organized by EC
- Participants: SCAR, Programme committee SC2, representatives of relevant European initiatives – JU BBI, JPI FACCE, JPI HDHL, JPI Ocean...



H2020 - Work Programme 2018-19 (20) planning

STRATEGIC PROGRAMMING (2015 – 2016)



Source: European Commission

H2020 - Work Programme 2018-19 (20) planning

WORK PROGRAMME (2016 – 2017)

Oct 2016 – June 2017

DRAFTING WORK PROGRAMME (from Oct 2016...)

Start drafting Work Programme

- ◆ **START DRAFTING WP** Oct-2016
- ◆ Meetings with AG/PC/SCAR
- ◆ Horizon Group
- ◆ PC Meeting
- ◆ Meeting with DG & CAB on topics orientations
- ◆ **1st DRAFT WP (Roadmap, indicative topics & timing of actions)** Jan-2017
- ◆ Input draft Interim evaluation H2020
- ◆ **2nd DRAFT** Apr-2017
- ◆ **FINAL DRAFT** Jun-2017

ADOPTION and COMMUNICATION (from June 2017...)

Adoption procedure

- ◆ **Inter-service consultation** Jun-2017
- ◆ **PC vote** Jul-2017
- ◆ **e-Greffe procedure** Sep-2017
- ◆ **ADOPTION** Oct-2017

Communication

- ◆ NCP meetings
- ◆ Central Info days

July – October 2017

Bioeconomy initiative in CR

- Activity of University of South Bohemia
- First International bioeconomy course 23-27 May 2016
 - Theoretical lectures – introduction to bioeconomy from economic, political and environmental point of view
 - Bioeconomy in practice and in labs - excursions
 - Good practice in bioeconomy – case studies in region
 - Students teamwork

More info: bioeconomy.jcu.cz bei.jcu.cz



H2020 info:

http://ec.europa.eu/research/horizon2020/index_en.cfm

Participant portal:

<http://ec.europa.eu/research/participants/portal/desktop/en/home.html>

National H2020 portal:

<http://www.h2020.cz>

CZELO:

<http://www.czelo.cz>

Czech ERA portal:

<http://evropskyvyzkum.cz>