

Funding research and innovation for Bioeconomy development from H2020

Bioeconomy course, 23 May 2017, České Budějovice Naďa Koníčková, TC AV ČR



TECHNOLOGY CENTRE CAS



- Not for profit organisation
- Established in 1994
- Supports the participation of the Czech Republic in the European Research Area provides services of the NCPs for Horizon 2020 programme
- Provides analytical and conceptual support for strategic STI policy-making
- Performs international technology transfer
- Supports creation and development of small innovative firms





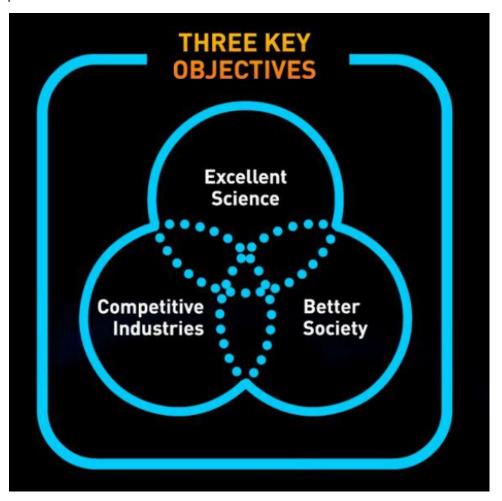




What is Horizon 2020?

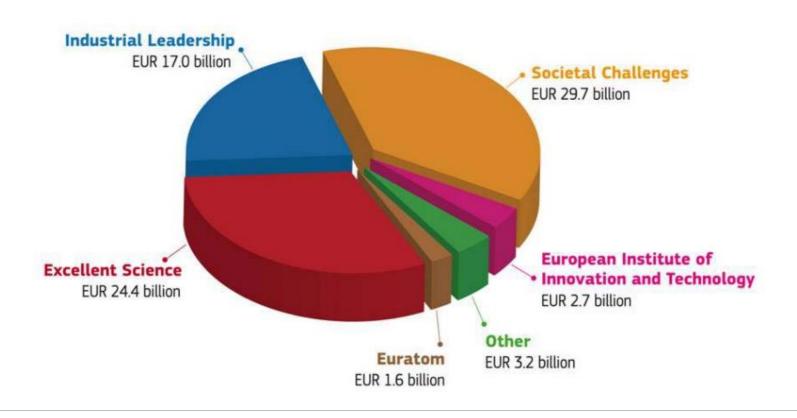
- **European programme** supporting transnational collaboration in research, development and innovation
- Coupling research to innovation from research to retail, all forms of innovations
- Focus on societal challenges facing EU society e.g. health, food security, clean energy and transport
- Open for all companies, universities, research institutes in all EU countries and beyond







HORIZON 2020 BUDGET (EUR 78.6 billion, current prices)



EC: Factsheet: Horizon 2020 budget



HORIZON 2020

	Horizon 2020 Structure	
Excellent Science	Industrial Leadership	Societal Challenges
European Research Council (ERC)	Leadership in Ena Industrial Technolog ICT, KETS, Space	Health and Wellbeing
		Food security
Future and Emerging Technologies (FET)		Transport
	{ }	Energy
Marie Sklodowska- Curie Actions (MSCA)	Access to Risk Finance	Climate action
Research	Innovation in SMEs	Societies
Infrastructures		Security
	cipation; Science with and for Society, cial Sciences and Humanities (SSH) ar	
European Institute of Innovation and Technology (EIT)	EURATOM	Joint Research Centre (JRC)



Societal challenges in H2020

Total funding for 2014-2020	€ million
Health, demographic change & wellbeing	7 472
Food security, sustainable agriculture and forestry, marine/maritime/inland water research and the bioeconomy	3 851
Secure, clean & efficient energy	5 931
Smart, green & integrated transport	6 339
Climate action, environment, resource efficiency & raw materials	3 081
Inclusive, innovative & reflective societies	1 310
Secure societies	1 695



HORIZON 2020 - FOOD SECURITY, SUSTAINABLE AGRICULTURE, FORESTRY, MARINE....BIOECONOMY

Agriculture & Forestry

Marine Resources

Food

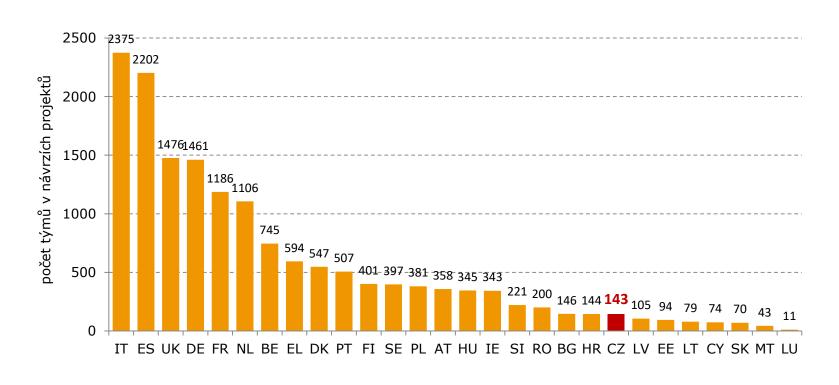
BioIndustries

Rural areas

- Actions in support of "Climate readiness" of terrestrial and aquatic production systems (food and non-food)
- Support to circular economy production systems based on Reducing, Reusing and Recycling
- Healthy production systems, healthy food, impact of production systems (environmental, economic, social)
- Enhancing mechanisms, delivery and uptake of innovations
- The territorial dimension of activities in primary production, food and bio-based industries: Focus on rural and coastal perspectives



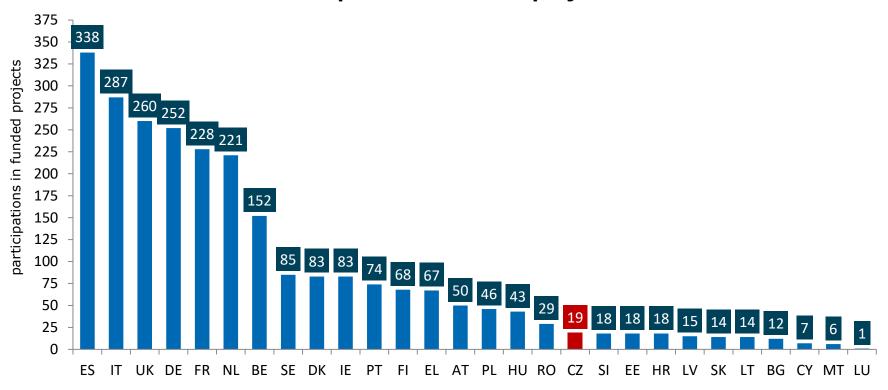
PROJECT PROPOSALS H2020 - SC2 (FOOD SECURITY, SUST. AGRICULTURE...)





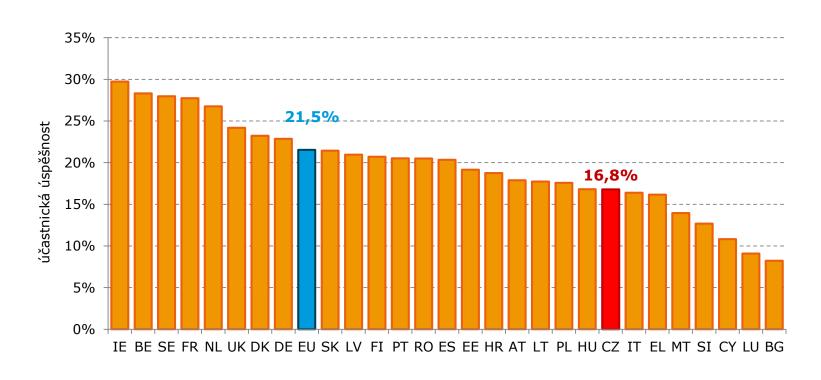
H2020 - SC2

Participations in funded projects





PARTICIPANTS SUCCESS RATE H2020-SC2





HORIZON 2020

	Horizon 2020 Structure	
Excellent Science	Industrial Leadership	Societal Challenges
European Research	Leadership in Enabling and Industrial Technologies (LEIT) -	Health and Wellbeing
Council (ERC)		Food security
Future and Emc Technologies (FE1)	ICT, KETS, Space	Transport
	Access to Risk Finance	Energy
Marie Sklodowska- Curie Actions (MSCA)		Climate action
Research		Societies
Infrastructu	Innovation in SMEs	Security
	ipation; Science with and for Society, ial Sciences and Humanities (SSH) and	
European Institute of Innovation and Technology (EIT)	EURATOM	Joint Research Centre (JRC)



Industrial leadership in H2020

Total funding for 2014-2020	€ million
Leadership in enabling & industrial technologies (LEITs) (ICT, nanotechnologies, materials, biotechnology, manufacturing, space)	13 557
Access to risk finance Leveraging private finance & venture capital	2 842
Innovation in SMEs Fostering all forms of innovation in all types of SMEs	616



HORIZON 2020 - KEY ENABLING BIOTECHNOLOGIES

Cutting-edge biotechnologies

Biotech-based ind.processes

Platform technologies

- Synthetic biology, Systems biology, Bioinformatics, Nano-biotechnology, Biotechnology in convergence with ICT
- Novel and improved biocatalysts and processes, novel and improved microorganisms including microbial communities and pathways, new generation of bioreactors, biotechnology for detecting, monitoring, preventing and removing pollution
- Platform technologies, industrial applications derived from advancements on "omics" technologies



SME instrument

Phase 2: R&D, demonstration, market replication

Phase 3: Commercialisation

Input: Idea/Concept:
 "Business Plan 1"
 (~ 10 pages)

Activities:

Feasibility of concept
Risk assessment
IP regime
Partner search
Design study
Pilot application
etc.

Output: elaborated "Business plan 2"

Lump sum: 50.000 €

~ 6 months

Input: "Business plan 2" plus description of activities under Phase 2 (~ 30 pages)

Activities:
Development,
prototyping, testing,
piloting,
miniaturisation,
scaling-up, market
replication,
research

Output: "investor-ready Business plan 3"

1-3 (5) M€ EC funding ~ 12 to 24 months

Promote instrument as quality label for successful projects

Facilitate access to private finance

Support via networking, training, information, addressing i.a. IP management, knowledge sharing, dissemination

SME window in the EU financial facilities (debt facility and equity facility)

No direct funding



BIO-BASED INDUSTRIES JOINT UNDERTAKING

- Created under the umbrella of Horizon 2020
- In the year 2014 a Council regulation established this public-private partnership (PPP) developing sustainable and competitive bio-based industries in Europe
- Partners:
 - European Union (European commission)
 - Bio-based industries consortium (BIC)

Funding: 2,7 bil.euro private investmens +

975 mil. euro EC

www.bbi-europe.eu





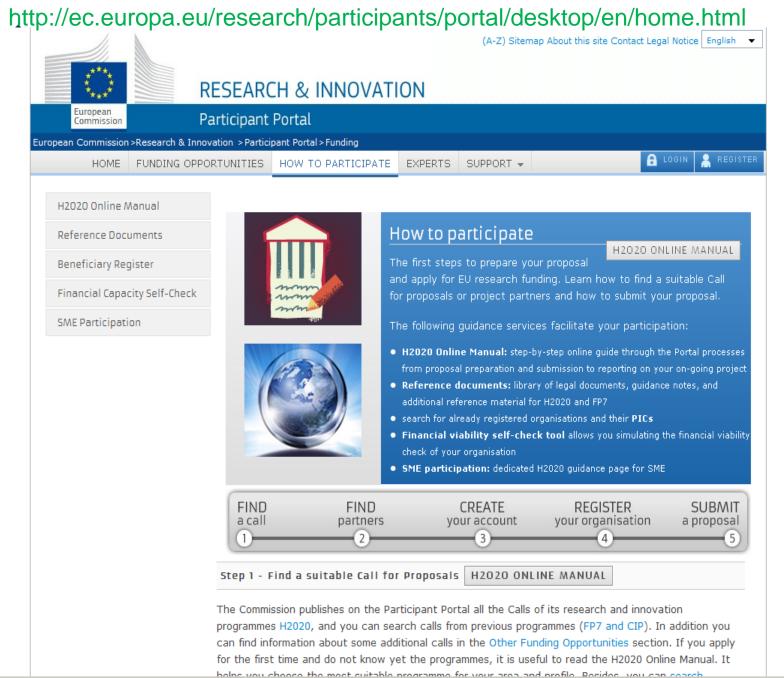
BBI JU OBJECTIVES

- Developing sustainable and competitive bio-based industries in Europe by:
 - Demonstrating new technologies to fill the gap in value chains
 - Developing bussines models
 - Set-up flagship biorefinery plants

Call for proposals 2017 is open (deadline 7.9.2017)

Projects focusing on: valorization of waste, byproducts, algae, biomass conversion, integrated biorefineries, proteins and bio-active compounds from residues, bioplasts, biochemicals.....

 https://www.bbi-europe.eu/participate/callsproposals-2017



ternet 🗐 🔻 🛡 100%



SEARCHING FOR ADVICE AND PARTNERS FOR JOINT PROJECTS?

JU Bio-based industries calls 2017, Info day Brussels 28.4. 2017+partnering event

https://scic.ec.europa.eu/fmi/ezreg/BBI2017/start

Partnering events in preparation (H2020 Societal challenge2 calls 2018):

H2020 SC2 Infoday, Brusel, 14.11.2017 + brokerage event 15.11.2017

Brokerage event – satellite event of RAFA symposium, Praha 9.11.2017

BioHorizon – network of National contact points for H2020 – SC2+biotech

http://www.ncp-biohorizon.net/



INFORMATION SOURCES

Participant Portal

http://ec.europa.eu/research/participants/portal/

Calls information, documents, administration and management of projects

CORDIS

http://cordis.europa.eu/projects/

Information on funded projects, partner search tool



Thank you!

Naďa Koníčková konickova@tc.cz 234 006 109