

EU support to research and innovation in bioeconomy

Bioeconomy course, 21 May 2018, České Budějovice
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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



Podpora podniků na dosah ruky



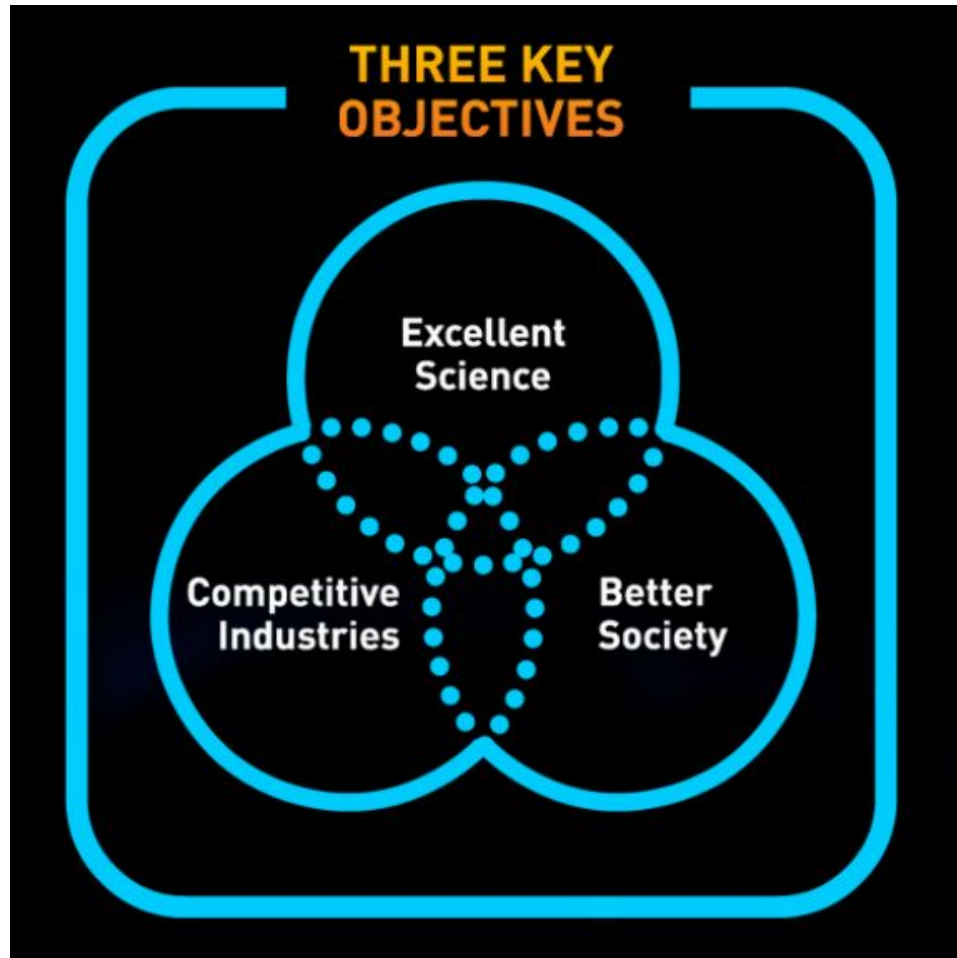
European Research Area

What is Horizon 2020?

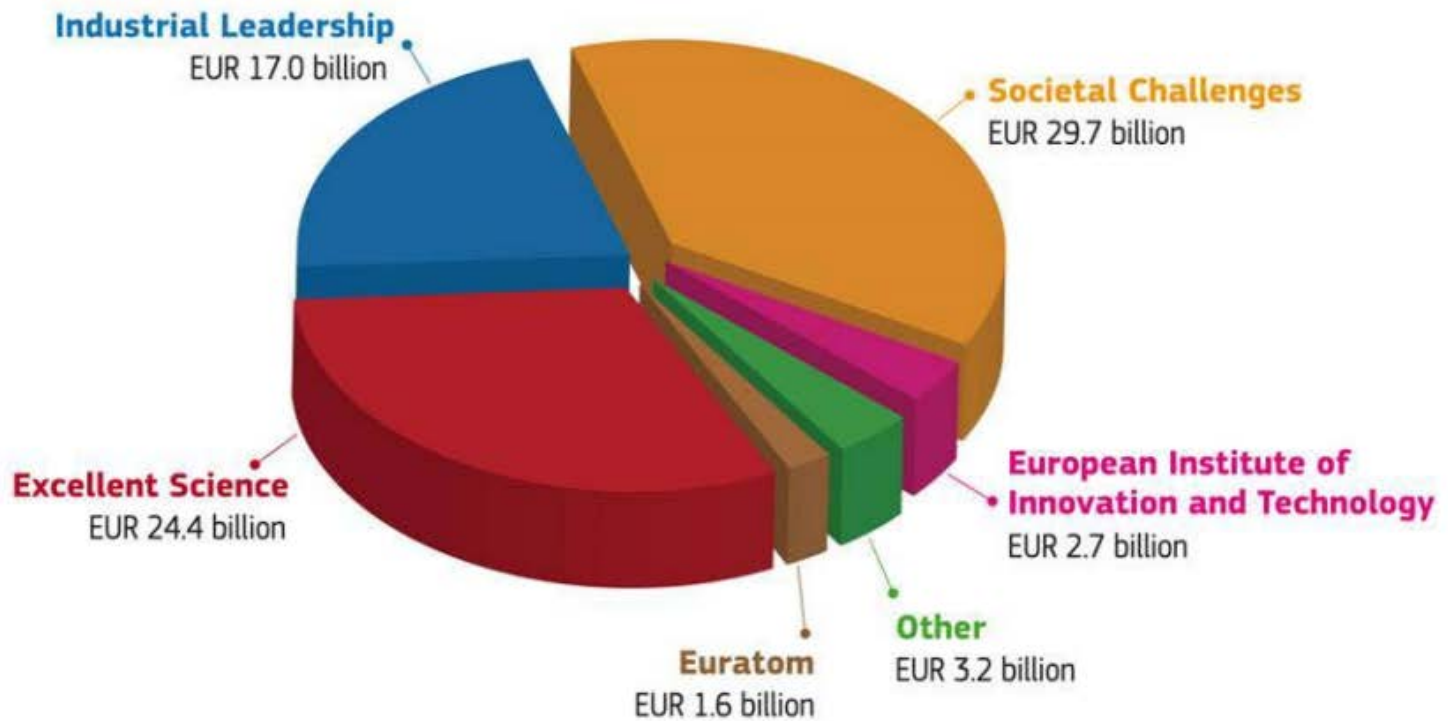
- **European programme** supporting transnational collaboration in research, development and innovation
 - **Coupling research to innovation** from research to retail, all forms of innovations
 - **Focus on societal challenges** facing EU society e.g. health, food security, clean energy and transport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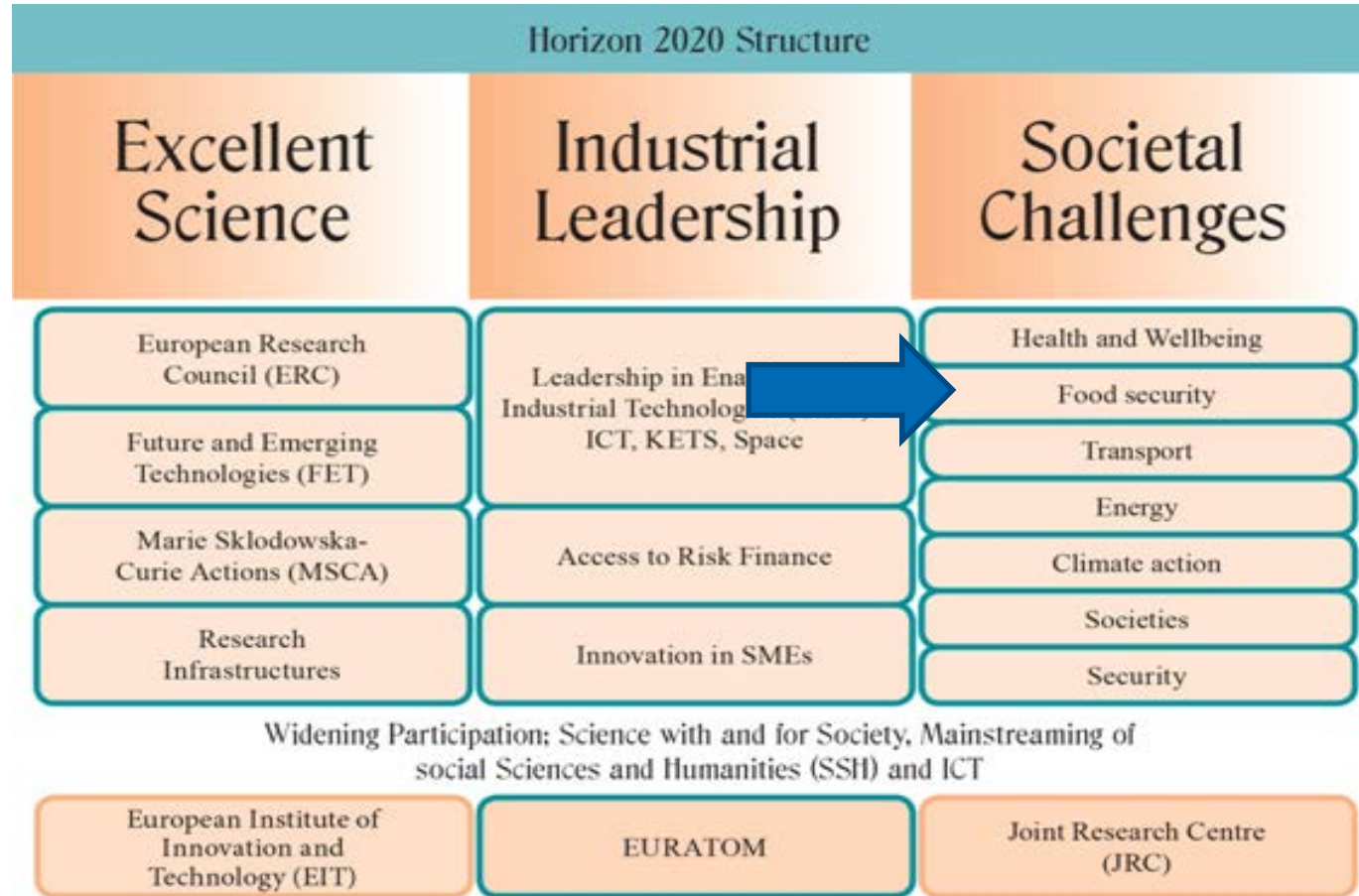


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HORIZON 2020 BUDGET (EUR 78.6 billion, current prices)





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

Agriculture
& Forestry

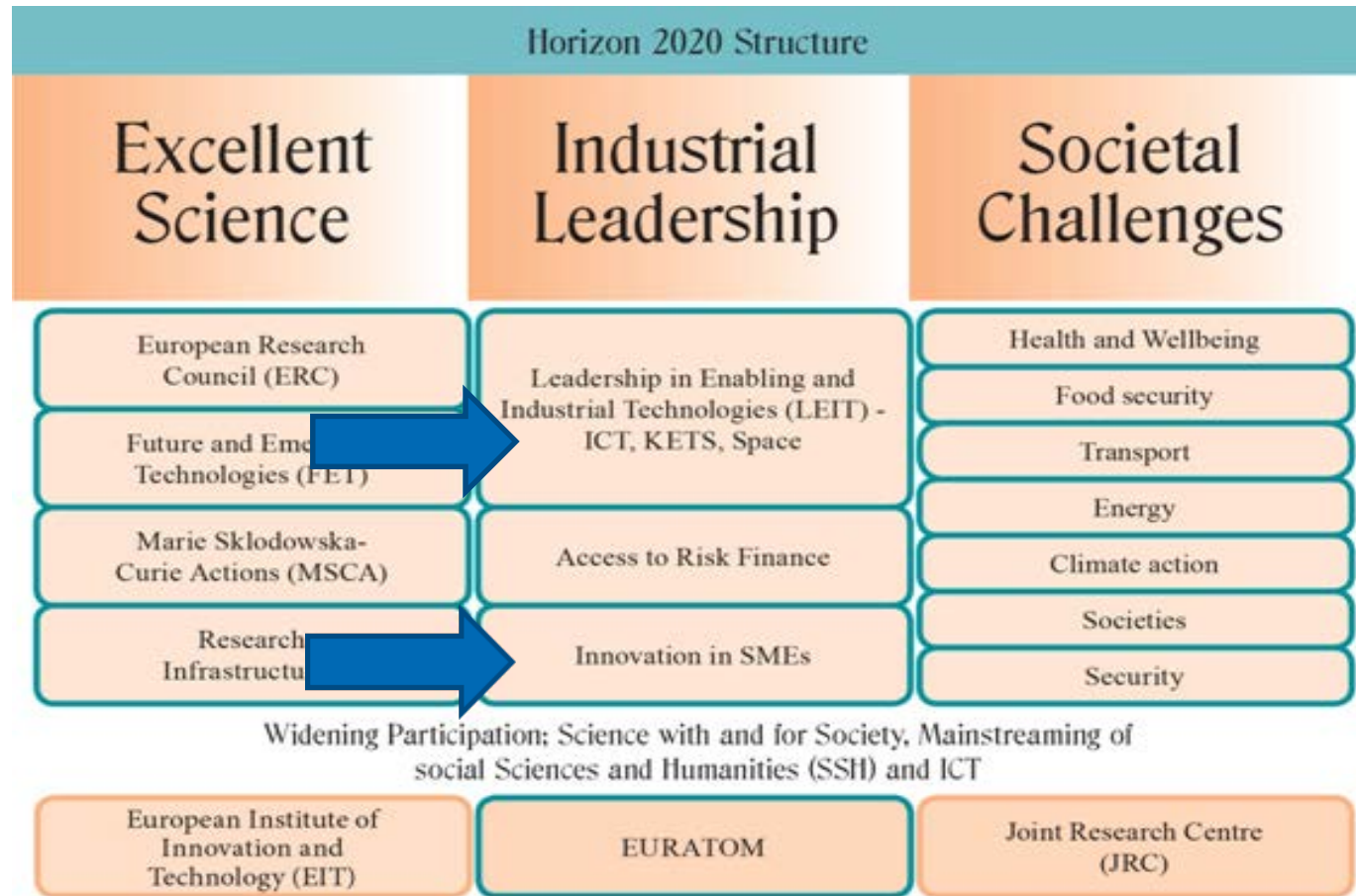
Marine
Resources

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**
-



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

**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





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Phase 1: Concept and feasibility assessment

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

SME instrument

Phase 2: R&D, demonstration, market replication

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

Phase 3: Commercialisation

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)

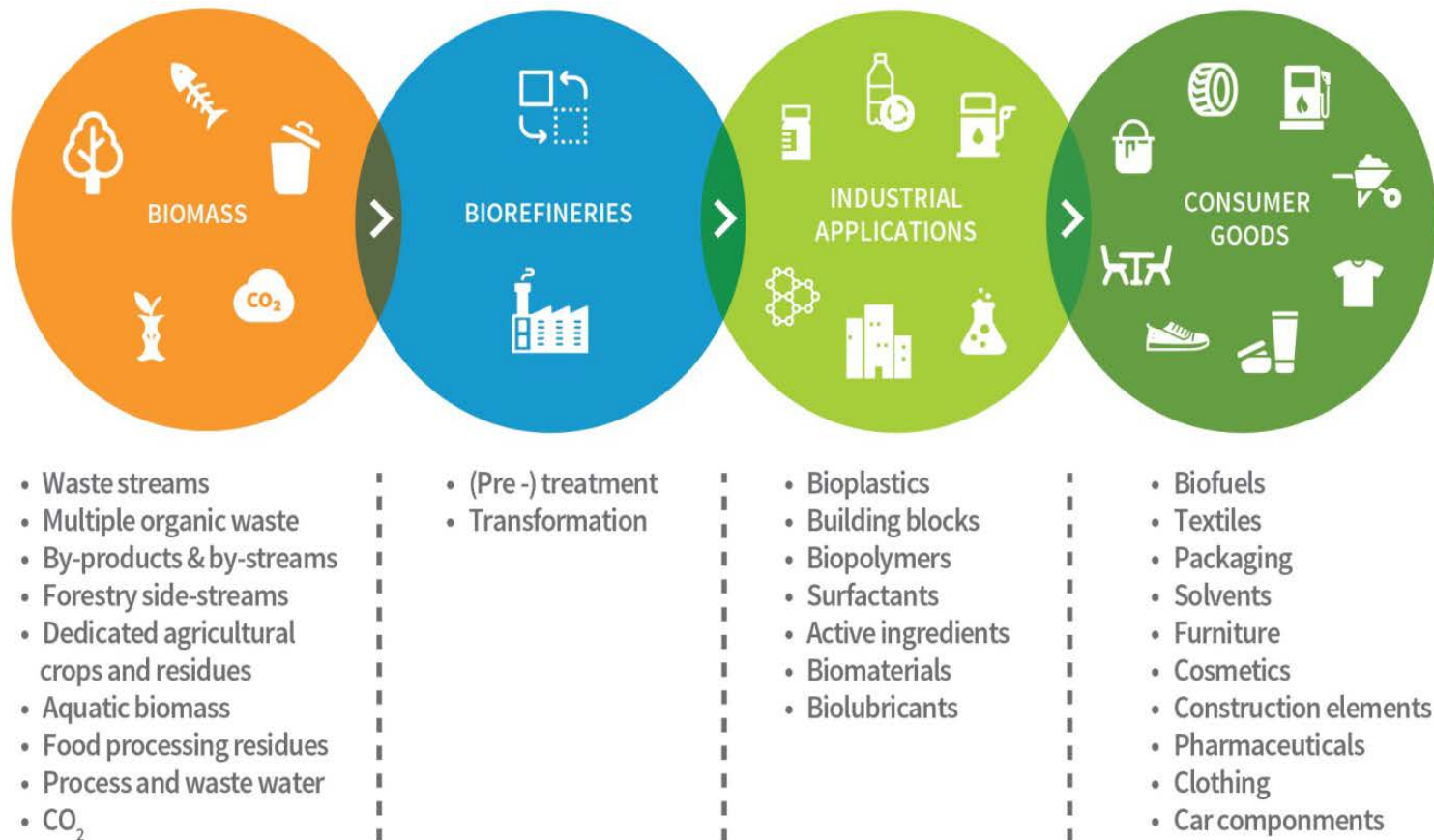
Funding: 2,7 bil.euro private investmens +
975 mil. euro EC

www.bbi-europe.eu



Bio-based industries value chains

BBI value chains represent 3.3 million jobs and € 674 bn turnover but **extremely fragmented** between **actors** and across **geographies**



- **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 2018 is open (till 6 Sept 2018)

Projects focusing on: feedstock, process, products, market uptake

<https://www.bbi-europe.eu/participate/calls-proposals-2018>

BIOWAYS - Increase public awareness of bio-based products and applications supporting the growth of the European bioeconomy

EFFORTE - Efficient forestry by precision planning and management for sustainable environment and cost-competitive bio-based industry

AgriMax - Agri and food waste valorisation co-ops based on flexible multi-feedstocks biorefinery processing technologies for new high added value applications

HYPERBIOCOAT - High performance biomass extracted functional hybrid polymer coatings for food, cosmetic and medical device packaging

GreenProtein - Revalorisation of vegetable processing industry remnants into high-value functional proteins and other food ingredients



RESEARCH & INNOVATION

European Commission

Participant Portal

European Commission > Research & Innovation > Participant Portal > Funding

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FUNDING OPPORTUNITIES

HOW TO PARTICIPATE

EXPERTS

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H2020 Online Manual

Reference Documents

Beneficiary Register

Financial Capacity Self-Check

SME Participation



How to participate

H2020 ONLINE MANUAL

The first steps to prepare your proposal and apply for EU research funding. Learn how to find a suitable Call for proposals or project partners and how to submit your proposal.

The following guidance services facilitate your participation:

- **H2020 Online Manual:** step-by-step online guide through the Portal processes from proposal preparation and submission to reporting on your on-going project
- **Reference documents:** library of legal documents, guidance notes, and additional reference material for H2020 and FP7
- search for already registered organisations and their **PICs**
- **Financial viability self-check tool** allows you simulating the financial viability check of your organisation
- **SME participation:** dedicated H2020 guidance page for SME

FIND a call

FIND partners

CREATE your account

REGISTER your organisation

SUBMIT a proposal

1

2

3

4

5

Step 1 - Find a suitable Call for Proposals

H2020 ONLINE MANUAL

The Commission publishes on the Participant Portal all the Calls of its research and innovation programmes **H2020**, and you can search calls from previous programmes (**FP7** and **CIP**). In addition you can find information about some additional calls in the **Other Funding Opportunities** section. If you apply for the first time and do not know yet the programmes, it is useful to read the H2020 Online Manual. It helps you choose the most suitable programme for your area and profile. Besides, you can search

SEARCHING FOR ADVICE AND PARTNERS FOR JOINT PROJECTS?

JU Bio-based industries calls 2018, Info day Brussels

<https://www.bbi-europe.eu/events/bbi-ju-info-day-2018>

Partnering events in preparation (H2020 Societal challenge 2 calls 20198) :

H2020 SC2 Infoday, Brusel, 25.6.2018 + brokerage event 26.6.2018

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

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

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
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Thank you!

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