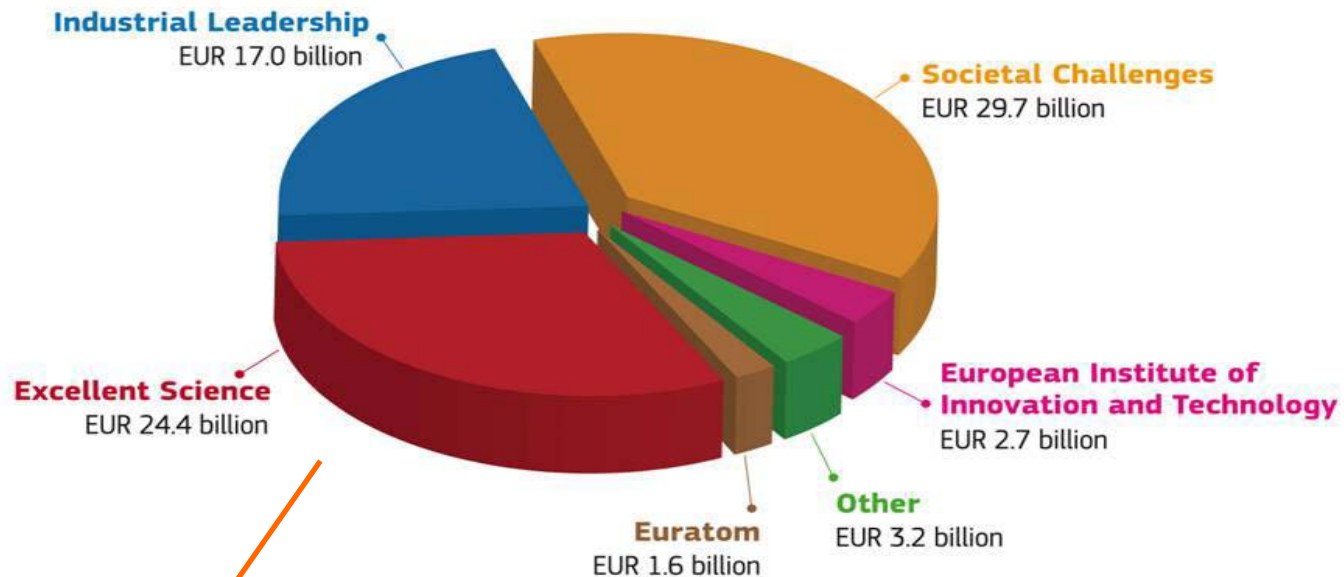


THE EU FRAMEWORK PROGRAMME FOR RESEARCH AND INNOVATION

HORIZON 2020

HORIZON 2020 BUDGET (EUR 78.6 billion, current prices)



Biggest EU investment in Research and Innovation

Budget for SC2:
> €3,8 billion
more than double
of FP7 budget

Research and
Innovation

Societal challenges

Why:

- Concerns of citizens and society/EU policy objectives (climate, environment, energy, transport, etc) cannot be achieved without innovation
- Breakthrough solutions come from multi-disciplinary collaborations, including social sciences & humanities
- Promising solutions need to be tested, demonstrated and scaled up

Societal challenges in Horizon 2020



**Tackling
societal
challenges
for a better
society**



1. Health, demographic change and wellbeing

2. Food security, sustainable agriculture and forestry, marine and maritime and inland water research, and the bioeconomy

3. Secure, clean and efficient energy

4. Smart, green and integrated transport

5. Climate action, resource efficiency and raw materials

6. Inclusive, innovative and reflective societies

7. Secure societies

Activities:



**Agriculture
and
forestry**

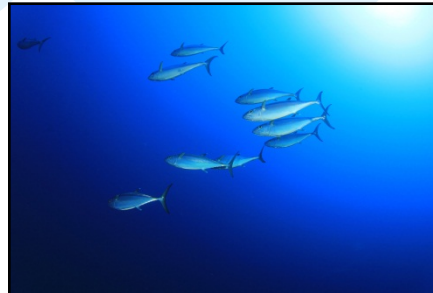
**Agri-food
sector for a
safe and
healthy diet**



**Aquatic
living
resources**

**Bio-based
industries
and
bioeconomy**

**Marine and
maritime
research**



Activity 2.1. Sustainable Agriculture and Forestry

- 2.1.1. Increasing **production** efficiency, coping with **climate change**, while ensuring **sustainability and resilience**
- 2.1.2. Providing **ecosystem services** and public goods
- 2.1.3. Empowerment of **rural areas**, support to policies and rural innovation
- 2.1.4. Sustainable **Forestry**



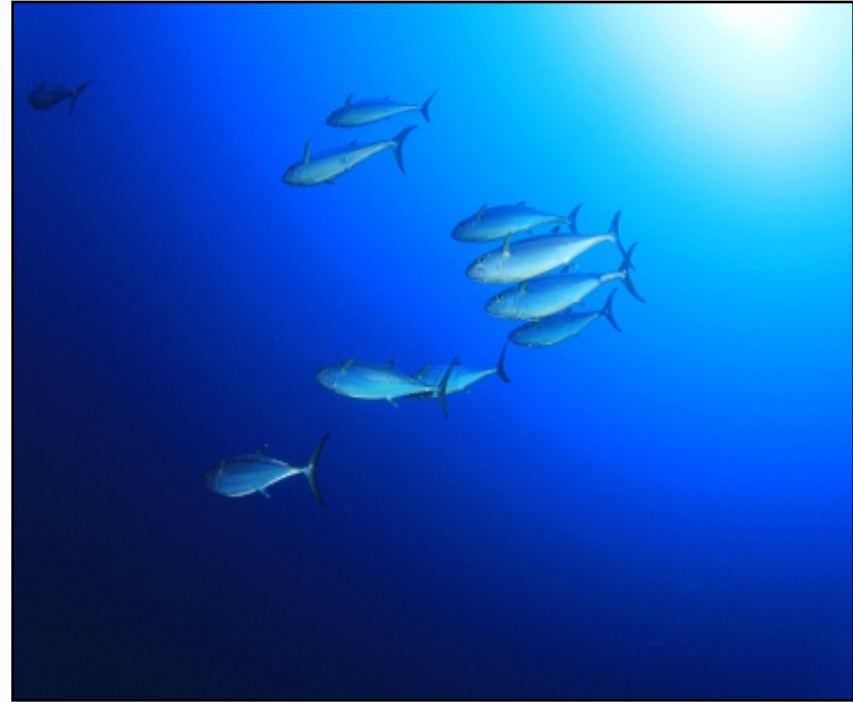
Activity 2.2 Sustainable and competitive agri-food sector for a safe and healthy diet

- 2.2.1. Informed **consumer choices**
- 2.2.2. **Healthy and safe foods** and diets for all
- 2.2.3. A sustainable and competitive **agri-food industry**



Activity 2.3. Unlocking the potential of aquatic living resources

- 2.3.1. Developing sustainable and environmentally-friendly **fisheries**
- 2.3.2. Developing competitive and environmentally-friendly **European aquaculture**
- 2.3.3. Boosting **marine and maritime innovation** through biotechnology



Activity 2.4. Sustainable and competitive bio-based industries and bioeconomy

Full title: Activity 2.4. Sustainable and competitive bio-based industries and supporting the development of a European bioeconomy

2.4.1. Fostering the **bioeconomy** for **bio-based industries**

2.4.2. Developing integrated **biorefineries**

2.4.3. Supporting **market development** for bio-based products and processes

**Most activities related to sustainable and competitive bio-based industries as defined in the Horizon 2020 Specific Programme will be implemented through the Joint Technology Initiative (JTI) on Bio-based Industries.*



Activity 2.5. Cross-cutting marine and maritime research

2.5.1. **Climate change impact** on marine ecosystems and maritime economy

2.5.2. Developing the potential of **marine resources** through an integrated approach

2.5.3. Cross-cutting concepts and technologies **enabling maritime growth**

HORIZON 2020



Implementing H2020 SC2

From Specific Programme to Work Programme 2014-2015

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

Strategic
Programming

WORK PROGRAMME Calls 2014-2015

**Sustainable Food
Security**

Blue Growth

**Innovative,
Sustainable and
Inclusive
Bioeconomy**

Personalising Health and Care (SC1)

Waste (SC5)

Water Innovation (SC5)

Three main calls of SC2

Sustainable Food Security

- Sustainable food production systems
- *Safe food and healthy* diets and sustainable consumption
- Global drivers of food security

Blue Growth

- Sustainably exploiting the diversity of marine life
- New offshore challenges
- Ocean observation technologies/systems
- Socio-economic dimension - engagement with society

Innovative, Sustainable and Inclusive Bioeconomy

- Sustainable agriculture and forestry
- Sustainable and competitive bio-based industries
- Cross-cutting actions covering all the activities

International cooperation actions in WP2014-2015

- General openness to third countries
- Actions related to major initiatives or actions relevant for certain regions/countries
- International cooperation relevant topics in the calls
- Openness of SC2 ERANET actions to international cooperation
- Openness of SC2 NCP promotion topic to third country NCPs (based on previous success of Biocircle 1&2) – specific importance of third country NCPs as interlocutors

Ensuring continuity through working groups and task forces of FP7 KBBE

- **EC-US Task Force on Biotechnology Research** (since 1990) working groups on bio-based products and bioenergy, environmental biotechnology, marine genomics, plant biotechnology, animal biotechnology, synthetic biology
- **International KBBE Forum** with Australia, Canada and New Zealand (since 2010), working groups on Bio-based Industrial Products, Food & Health , Fisheries & Aquaculture and Sustainable Agriculture
- **EU-China Task Force on Agriculture, Food and Biotechnology** (since 2011)
- **EC-Russia Working Group on Agro-Bio-Food** (since 2005)

First major initiatives of Horizon 2020 in Societal Challenge 2

Transatlantic Research Alliance with USA and Canada – Galway Statement → Blue Growth call

EU-China Flagship Initiative on Food, Agriculture and Biotechnology → topics in related calls

- Experience with these first initiatives and possible follow up or preparing other actions on multilateral level in the future

Rules for funding

Open to participation from across the world

Automatic funding:

- *Member States (including overseas departments and overseas territories)*
- *Associated Countries*
- *exhaustive list of countries in annex to work programme (but: no longer BRIC + Mexico in this list!) – Annex A: List of countries and applicable rules for funding*

Participants from other countries only funded in exceptional cases

– Rules for Funding, Article 10 on Eligibility for funding:

- *when provision is made in the call text*
- *based on bilateral agreement (e.g. Health challenge – NIH)*
- *when the Commission deems it essential for carrying out the action (case by case assessment) – needs to be mentioned and justified in the proposal and assessed at the evaluation stage*

Future actions/ Next steps

- Strategic Programming process under way
- Dialogue with international partner countries in existing fora and in new initiatives and groupings (e.g. creation of ad-hoc working groups where necessary)
- Priority setting and actions based on mutual interest
- Consideration to work on a multilateral basis in a specific international forum on the Bioeconomy
- Better alignment of research agendas (European and Member States) → openness of ERANETs and JPI activities, allowing the promotion of more programme based cooperation

Pós Doutorado no Joint Research Centre (JRC) da UE



Inscrições de 07
a 30 de outubro

01



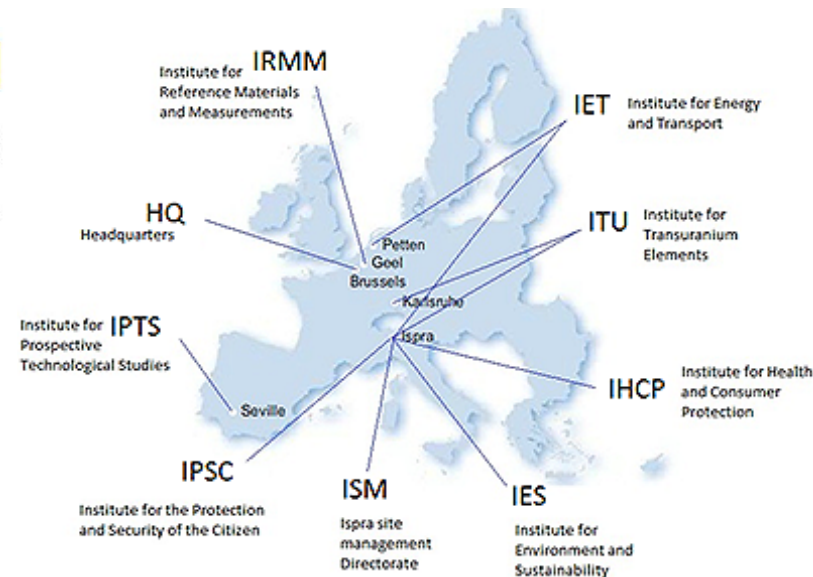
12 vagas

02



Áreas: Ciências Agrárias,
Energia, Meio Ambiente,
Biotecnologia,
Nanotecnologia e Segurança
da Informação.

03



<http://www.cienciasemfronteiras.gov.br/web/csf/uniao-europeia>



HORIZON 2020

**Thank you
for your attention!**

Useful links:

Horizon 2020: www.ec.europa.eu/research/horizon2020

Participant Portal and WPs: <https://ec.europa.eu/research/participants/portal>

Bioeconomy Portal : <http://ec.europa.eu/research/bioeconomy/>

SFS call (1)

- SFS 1 - 2014/2015: Sustainable terrestrial livestock production
 - A. Genetics and nutrition and alternative feed sources for terrestrial livestock production [2014] – *China*
 - B. Tackling losses from terrestrial animal diseases [2014] - *China*
- SFS 3 - 2014: Practical solutions for pests and invasive alien species affecting plants
 - A. Pests and invasive species in agriculture and forestry [2014] – *int. coop. relevant*
 - B. EU-China cooperation on IPM in agriculture [2014] - *China*
- SFS 4 - 2014: Soil quality and function [2014] - *China*
- SFS 5 - 2015: Strategies for crop productivity, stability and quality - *int. coop. relevant*
- SFS 6 - 2014: Sustainable intensification pathways of agro-food systems in Africa – *Africa*
- SFS 7 - 2014/2015: Genetic resources and agricultural diversity for food security, productivity and resilience
 - B. Management and use of genetic resources [2015] – *int. coop. relevant*

SFS call (2)

- SFS 10 - 2014/2015: Tackling disease related challenges and threats faced by European farmed aquatic animals – KBBE Forum
- SFS 13 - 2015: Biological contamination of crops and the food chain - China
- SFS 14 - 2014/2015: Authentication of food products
 - A. Authentication of olive oil [2014] – int. coop. relevant
- SFS 15 - 2014: Proteins of the future – int. coop. relevant
- SFS 16 - 2015: Tackling malnutrition in the elderly – KBBE Forum
- SFS 18 - 2015: Small farms but global markets: the role of small and family farms in food and nutrition security – Africa
- SFS 19 - 2014: Sustainable food and nutrition security through evidence based EU agro-food policies
 - B. Understanding relevant issues impacting the agro-food sector – *int. coop. relevant*
- SFS 20 - 2015: Sustainable food chains through public policies: the cases of the EU quality policy and of public sector food procurement - int. coop. relevant

BG call

- BG 1- 2015: Improving the preservation and sustainable exploitation of Atlantic marine ecosystems – Transatlantic
- BG 7 - 2015: Response capacities to oil spills and marine pollutions – Transatlantic
- BG 8 - 2014: Developing in-situ Atlantic Ocean Observations for a better management and sustainable exploitation of the maritime resources – Transatlantic
- BG 10 - 2014: Consolidating the economic sustainability and competitiveness of European fisheries and aquaculture sectors to reap the potential of seafood markets – international dimension
- BG 13 - 2014 Ocean literacy – Engaging with society – Social Innovation – Transatlantic
- BG 14 - 2014: Supporting flagship international cooperation initiatives: Atlantic Ocean Cooperation Research Alliance – Transatlantic
- BG 15 - 2014: European polar research cooperation – Transatlantic

ISIB call

- ISIB 3 - 2015: Unlocking the growth potential of rural areas through enhanced governance and social innovation – int. coop. relevant
- ISIB 9 - 2014: Supporting National Contact Points for Horizon 2020 Societal Challenge 2 on 'Food Security, Sustainable Agriculture, Marine and Maritime Research and the Bioeconomy' and the Key Enabling Technology (KET) 'Biotechnology' – int. coop. relevant
- 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 – int. coop. relevant
- ISIB 12 - 2015: Public-Public Partnerships in the bioeconomy- int. coop. relevant

Waste and PHC calls

- WASTE 2 - 2014: A systems approach for the reduction, recycling and reuse of food waste – *China*
- WASTE 7 - 2015: Ensuring sustainable use of agricultural waste, co-products and by-products - *China*
- PHC 7 - 2014: Improving the control of infectious epidemics and foodborne outbreaks through rapid identification of pathogens – *int. coop. relevant*

Type of action - funding

Type of action	Funding	Aim of action
Research and Innovation Action	100%	To establish new knowledge or explore the feasibility of a new technology, product, process, service or solution
Innovation Actions	70% (except for non-profit entities)	To produce plans and arrangements or designs for new, altered or improved products, processes or services
Coordination and Support Actions	100%	Accompanying measures
SME instrument	various	To support innovative SMEs
ERA-NET co-fund	up to 33%	to support public-public partnerships, including joint programming initiatives between Member States