

THE FRAMEWORK PROGRAMME FOR RESEARCH AND INNOVATION

# HORIZON 2020

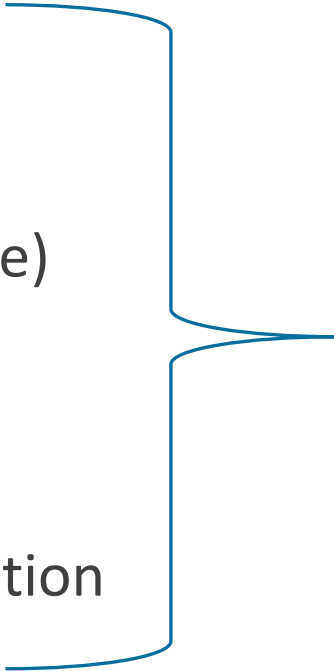
The logo for Horizon 2020 features a stylized globe of the Earth, showing continents and oceans, positioned centrally. The globe is set against a background of a blue horizon line with a bright sun or light source behind it, creating a lens flare effect. The entire scene is set against a deep blue background with a subtle pattern of light rays or a starry sky. The text 'HORIZON 2020' is written in a large, white, sans-serif font, with the globe acting as the letter 'O' in 'HORIZON'.

# WHAT IS HORIZON 2020?

- The European Union programme for research and innovation for 2014 – 2020
- A budget of just over €70 billion
- A Europe 2020 flagship initiative aimed at:
  - Securing Europe's global competitiveness
  - Responding to the economic crisis to invest in jobs and work
  - Addressing people's concern about their livelihoods, safety and environment
  - Strengthening the EU's global position in research, innovation and technology

# Who can participate?

Almost any legal entities such as:

- Universities (public and private)
  - Research Centres (public and private)
  - Companies (SMEs, big companies)
  - Local authorities
  - Associations, International organization
- 

Come from:

EU states

associates countries

third countries.

# The Structure:

Focus on ***three main pillars***:

***Excellent science***: Raising the level of excellence in Europe's science base by:

- supporting the best ideas
- developing European talent
- providing researchers with access to a research infrastructure

***Industrial leadership***: Stimulating the growth potential of European companies by:

- offering access to risk finance
- encouraging private investment in R&D
- engaging smaller companies by offering support for innovative SMEs

***Societal challenges*** : Reflecting the policy priorities of the European Commission. This covers all stages of research and innovation - from concept to market.



### ***Excelente science***

European Research  
Council (ERC)

Future and Emerging  
Technologies (FET)

Marie-Sklodowska-Curie  
Actions (MSCA)

Research Infrastructures

### ***Industrial leadership***

Leadership in enabling  
and industrial  
technologies (LEIT)

Access to risk finance

Innovation in SMEs

### ***Societal Challenges***

Health and wellbeing

Food security

Transport

Energy

Climate action

Societies

Security

Spreading excellence and widening participation

Science with and for society

EIT

JRC

EURATOM

# Excellent science

---

## Why?

- World class science is the foundation of tomorrow's technologies, jobs and wellbeing
- Europe needs to develop attract and retain research talent
- Researchers need access to the best infrastructures

**ERC**




Was created to boost scientific excellence of individual researchers.

It specifically encourages researchers to develop high risk ground-breaking projects :

Researchers can apply for :

- **ERC Starting Grant** = aims to support researchers with 2 to 7 years of experience after their PhD
- **ERC Consolidator Grant** = is designed to researchers with 8 to 12 years of scientific experience after their PhD
- **ERC Advanced Grant** = is open to excellent established researchers who are leaders in their field of research
- **ERC Proof of Concept Grant** = is open for ERC grantees only

**FET**  Help to create in Europe a fertile ground for responsible and dynamic multi-disciplinary collaborations on future and emerging technologies and for kick-starting new European research and innovation ecosystems around them.

Lines of activity to achieve the objective:

**FET Open:** supports the early-stages of the science and technology research and innovation around new ideas towards radically new future technologies

**FET Proactive:** addresses promising directions for research on future technologies

**FET Flagships:** Flagships are visionary, science-driven, large-scale research initiatives addressing grand Scientific and Technological (S&T) challenges.

**MSCA**  focus on training and career development of researchers



# *Industrial leadership*

---

## **Why?**

- Europe needs more innovative SMEs to create growth and jobs
- Strategic investment in key technologies (e.g. advanced manufacturing, micro-electronics) underpin innovation across existing and emerging sectors
- Europe needs to attract more private investment in research and innovation

# *Societal Challenges*

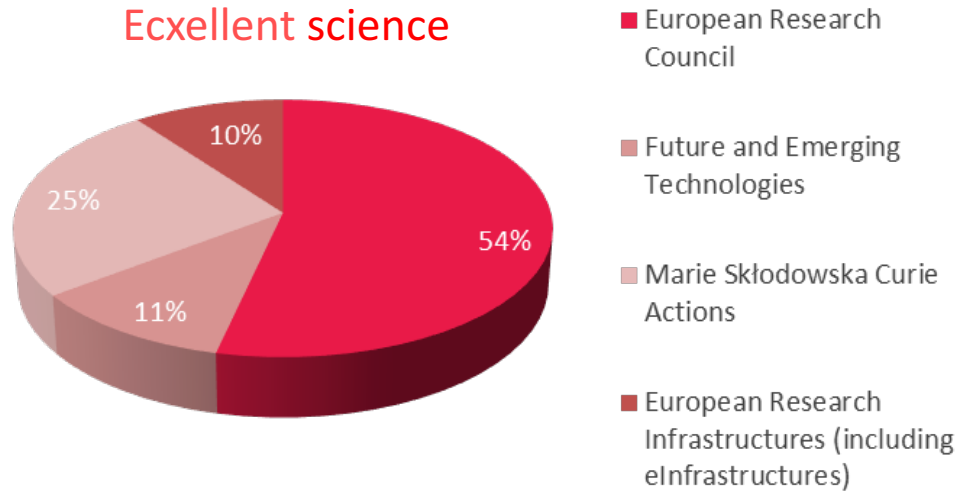
---

## **Why?**

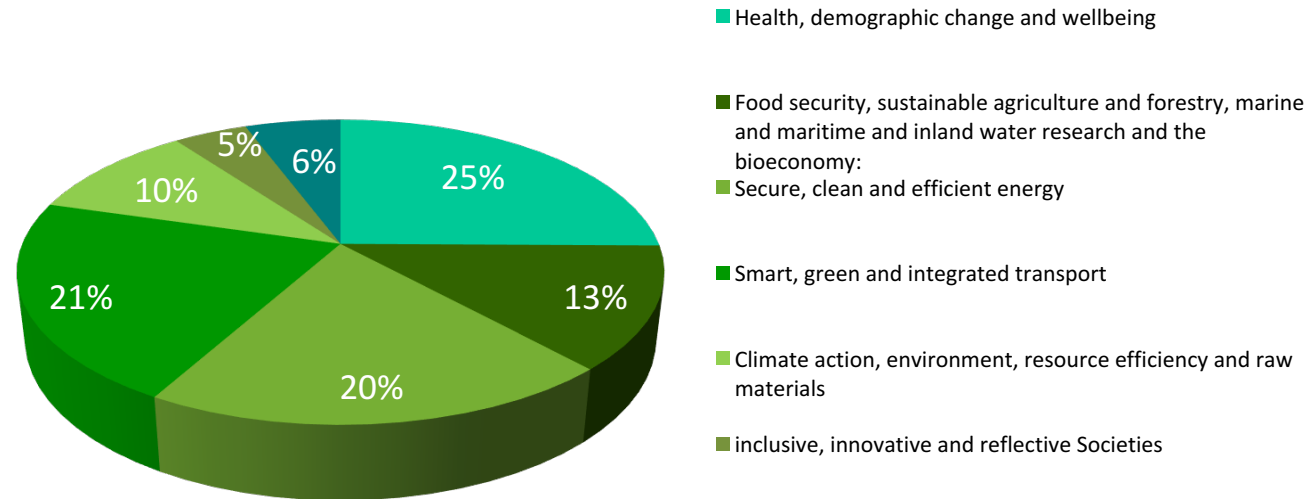
- EU policy objectives (climate, environment, energy, transport, etc) cannot be achieved without innovation
- Breakthrough solutions come from multi-disciplinary collaborations, including social sciences & humanities
- Promising solutions need to be tested, demonstrated and scaled up

# The activity's budget

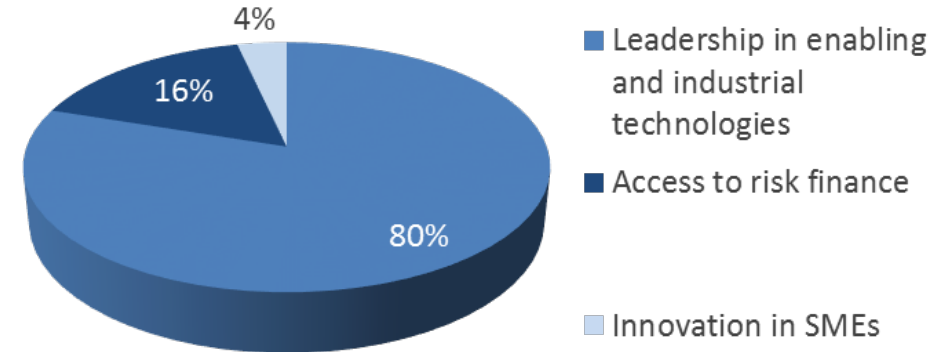
## Excellent science



## Societal challenges



## Industrial Leadership



	Compromise % 27.06.13	Million € (27.06.13)
<b>I. Excellent Science, of which:</b>	31,73%	21.609
<b>1. ERC</b>	17,00%	11.577
<b>2. FET</b>	3,50%	2.384
<b>3. MS Curie Actions</b>	8,00%	5.448
<b>4. Research Infrastructures</b>	3,23%	2.200
<b>II. Industrial Leadership, of which:</b>	22,09%	15.044
<b>Leadership in Enabling and Industrial Technologies</b>	17,60%	11.986
<b>Access to Risk Finance</b>	3,69%	2.513
<b>Innovation in SME's</b>	0,80%	544,81
<b>II.I Societal Challenges, of which:</b>	38,53%	26.240
<b>Health, demographic change and well being</b>	9,70%	6.606
<b>Food security, sustainable agriculture, marine and maritime research &amp; the bio economy</b>	5,00%	3.405
<b>Secure, clean and efficient energy</b>	7,70%	5.244
<b>Smart, green and integrated transport</b>	8,23%	5.605
<b>Climate action, resource efficiency and raw materials</b>	4,00%	2.724
<b>Europe in a changing world – Inclusive, innovative and reflective society</b>	1,70%	1.158
<b>Secure societies – Protecting freedom and security of Europe and its citizens</b>	2,20%	1.498
<b>Spreading Excellence and Widening Participation</b>	1,06%	722
<b>Science with and for society</b>	0,60%	409
<b>European Institute of Innovation and Technology - EIT</b>	3,52%	2.397
<b>JRC Non-nuclear</b>	2,47%	1.682
<b>EURATOM</b>		2.098
<b>Total</b>	100,00%	70.200

# Main types of Action

## 1. Research and innovation actions (RIA)


- *What?* Funding available for collaborative research projects tackling clearly defined challenges which can lead to the development of new knowledge or new technology.
- *Who?* Consortia of partners from different countries, industry and academia.

## 2. Innovation action (IA)


- *What?* Funding available for closer-to-the-market activities including prototyping, testing, demonstrating, piloting, scaling-up etc. for new or improved products, processes or services.
- *Who?* Consortia of partners from different countries, industry and academia.

## 3. Coordination and support actions (CSA)

- *What?* Funding available for actions consisting primarily of accompanying measures, such as the coordination and networking of research and innovation projects, programmes and policies (e.g. training, dissemination, exploitation, standardization, policy dialogues, etc.).
- *Who?* Single entities or consortia of partners from different countries, industry and academia.

RIA:  are one of the Key Features of Horizon 2020 and come with their own set of provisions and funding rates.

- consist of activities aiming to establish new knowledge and/or to explore the feasibility of a new or improved technology, product, process, service or solution.
- Funding rate :100% of eligible costs (unless the call provides exceptionally for another rate)

IA :  innovation activities directly aiming at producing plans and arrangements or designs for new, altered or improved products, processes or services (including prototyping, testing, demonstrating, piloting, large-scale product validation and market replication)

➤ Funding rate: 70% (100% for non profit organizations) of eligible costs (unless the call provides exceptionally for another rate)

CSA :  Funding rate: 100% of eligible costs

This presentation was compiled by Giulia Dario, who is doing an Erasmus + Internship at the Research Support Office, University of Aveiro. June 2017