

# Commission proposal for **Horizon Europe**

THE NEXT EU RESEARCH & INNOVATION  
PROGRAMME (2021 – 2027)

#HorizonEU

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SPIRE PPP Brokerage Event  
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# Horizon Europe

is the Commission proposal for a **€ 100 billion** research and innovation funding programme for seven years (2021-2027)



to strengthen the EU's scientific and technological bases



to boost Europe's innovation capacity, competitiveness and jobs



to deliver on citizens' priorities and sustain our socio-economic model and values

# Horizon Europe: our chance to shape the future

- Tackling **climate change**  
(35 % budgetary target)
- Helping to achieve **Sustainable Development Goals**
- Boosting the Union's **competitiveness and growth**

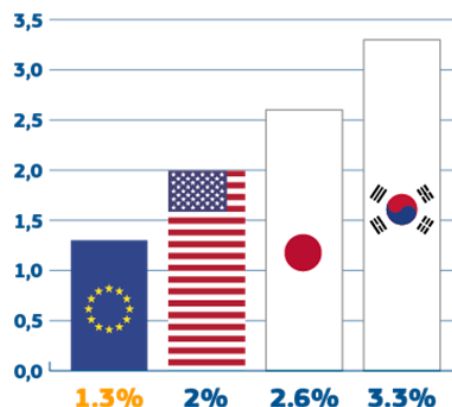


Credits: <https://www.un.org/sustainabledevelopment/sustainable-development-goals/>

# Europe has world-class research and strong industries

Our knowledge and skills are our main resources.

- **7%** of the world's population
- **20%** of global R&D
- **1/3** of all high-quality scientific publications
- **1/3** of total employment in Europe is in knowledge intensive activities



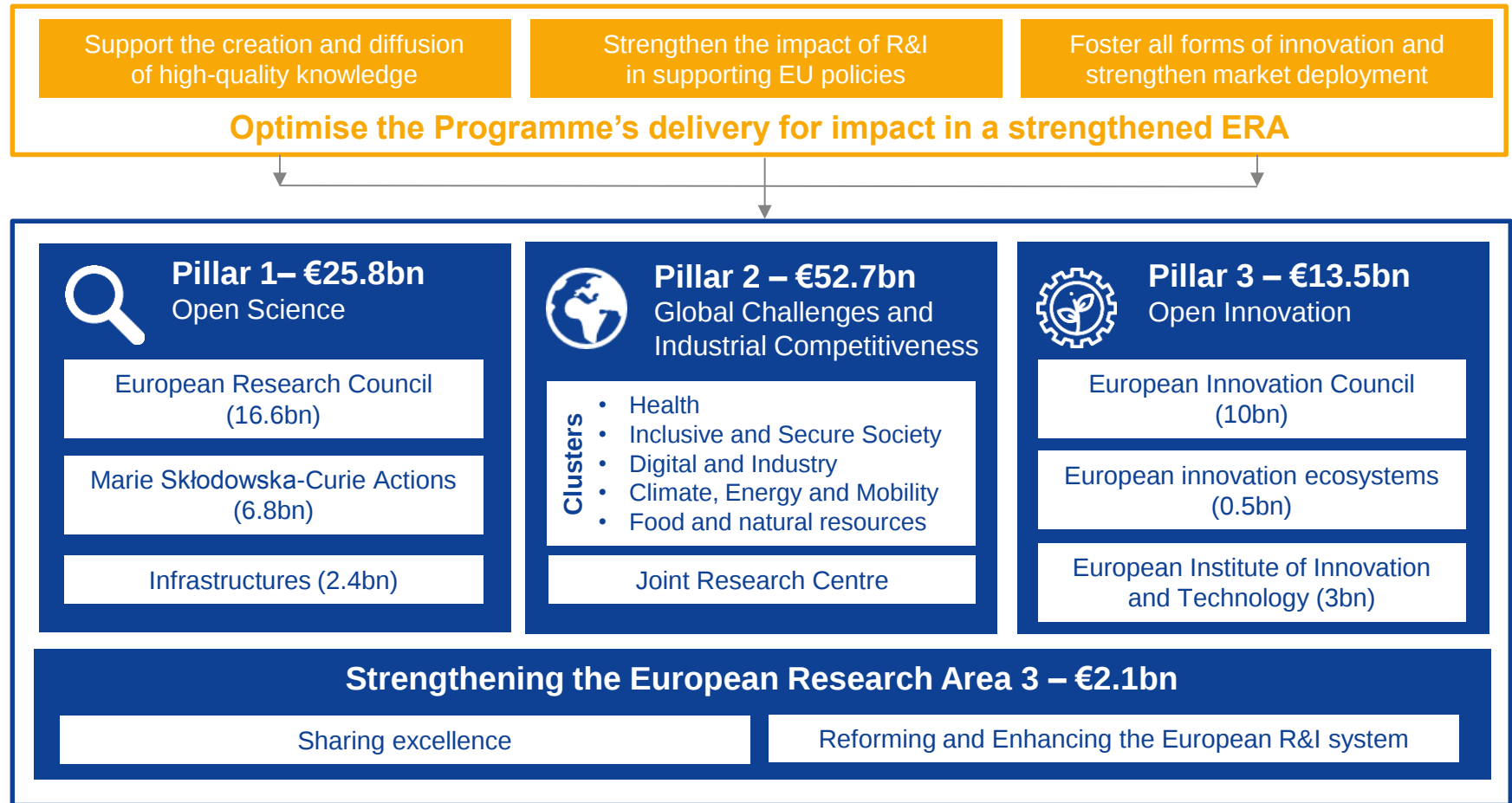
**1.3%**  
EU business  
R&D  
investment

**but Europe fails to transform leadership in science into leadership in innovation and entrepreneurship**

# Horizon Europe – What's new?

# Horizon Europe

## Specific objectives of the Programme



# Clusters in 'Global Challenges and Industrial Competitiveness'

| Clusters                                 | Areas of intervention                                                                                                                                                                                                                |                                                                                                                                                                                                                  |
|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Health<br>€7.7bn                         | <ul style="list-style-type: none"> <li>* Health throughout the life course</li> <li>* Non-communicable and rare diseases</li> <li>* Tools, technologies and digital solutions for health and care</li> </ul>                         | <ul style="list-style-type: none"> <li>* Environmental and social health determinants</li> <li>* Infectious diseases</li> <li>* Health care systems</li> </ul>                                                   |
| Inclusive and Secure Societies<br>€2.8bn | <ul style="list-style-type: none"> <li>* Democracy</li> <li>* Social and economic transformations</li> <li>* Protection and Security</li> </ul>                                                                                      | <ul style="list-style-type: none"> <li>* Cultural heritage</li> <li>* Disaster-resilient societies</li> <li>* Cybersecurity</li> </ul>                                                                           |
| Digital and Industry<br>€15.0bn          | <ul style="list-style-type: none"> <li>* Manufacturing technologies</li> <li>* Advanced materials</li> <li>* Next generation internet</li> <li>* Circular industries</li> <li>* Space</li> </ul>                                     | <ul style="list-style-type: none"> <li>* Key digital technologies</li> <li>* Artificial intelligence and robotics</li> <li>* Advanced computing and Big Data</li> <li>* Low carbon and clean industry</li> </ul> |
| Climate, Energy and Mobility<br>€15.0bn  | <ul style="list-style-type: none"> <li>* Climate science and solutions</li> <li>* Energy systems and grids</li> <li>* Communities and cities</li> <li>* Industrial competitiveness in transport</li> <li>* Smart mobility</li> </ul> | <ul style="list-style-type: none"> <li>* Energy supply</li> <li>* Buildings and industrial facilities in energy transition</li> <li>* Clean transport and mobility</li> <li>* Energy storage</li> </ul>          |
| Food and Natural Resources<br>€10.0bn    | <ul style="list-style-type: none"> <li>* Environmental observation</li> <li>* Agriculture, forestry and rural areas</li> <li>* Food systems</li> <li>* Circular systems</li> </ul>                                                   | <ul style="list-style-type: none"> <li>* Biodiversity and natural capital</li> <li>* Sea and oceans</li> <li>* Bio-based innovation systems</li> </ul>                                                           |

# Key Novelties

[See Impact Assessment]





# European Innovation Council

The EIC will support innovations with breakthrough and disruptive nature and scaleup potential that are too risky for private investors.

**European  
Innovation  
Council**

**Helping innovators create markets of the future,  
leverage private finance, scale up their  
companies,  
Innovation centric, risk taking & agile, pro-  
active management and follow up**

Two complementary instruments bridging the gap from idea to investable project

**Pathfinder: grants**  
(from early technology  
to pre- commercial)

**Accelerator:**  
**grants & blended finance**  
(from pre-commercial  
to market & scale-up)



# R&I Missions

## R&I Missions

**Connecting to citizens:** Missions will relate EU's research and innovation to society and citizens' needs, with strong visibility and impact

A mission will consist of a portfolio of actions intended to achieve **a bold and inspirational as well as measurable goal** within a set timeframe, with impact for science and technology, society and citizens that goes beyond individual actions

Horizon Europe proposal defines mission characteristics and criteria

Specific missions will be **co-designed with Member States, stakeholders and citizens** and programmed within the Global Challenges and Industrial Competitiveness pillar (drawing on inputs from other pillars)



# New approach to European Partnerships

New generation of objective-driven and more ambitious partnerships in support of agreed EU policy objectives

## Key features

- **Simple architecture and toolbox**
- **Coherent life-cycle approach**
- **Strategic orientation**

### Co-programmed

Based on Memoranda of Understanding / contractual arrangements; implemented independently by the partners and by Horizon Europe

### Co-funded

Based on a joint programme agreed by partners; commitment of partners for financial and in-kind contributions & financial contribution by Horizon Europe

### Institutional

Based on long-term dimension and need for high integration; partnerships based on Articles 185 / 187 of TFEU and the EIT-Regulation supported by Horizon Europe

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**Horizon Europe dedicated website**

<http://ec.europa.eu/horizon-europe>

**European Innovation Council**

<http://ec.europa.eu/research/eic>

**EU budget for the future**

[http://ec.europa.eu/budget/mff/index\\_en.cfm](http://ec.europa.eu/budget/mff/index_en.cfm)



# InvestEU for Research and Innovation (R&I)

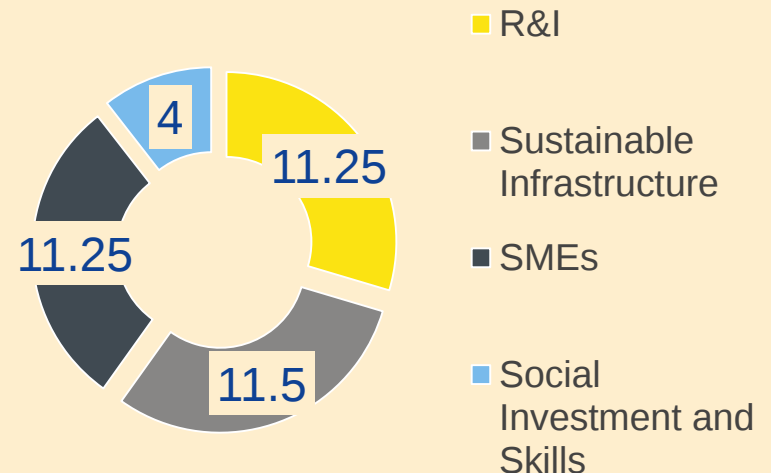
**Stimulates more investment in research and innovation**, notably by the private sector; leverages and complements national/regional initiatives

**No market distortion:** intervention only to address financing gaps in the R&I delivery chain (notably due to high risk)

Support through:

- InvestEU Fund
- InvestEU Assistance
- InvestEU Portal

Invest EU's 4 investment windows:  
budgetary guarantees in billion €



➔ leverages an estimated **€ 200 bn** of investments into R&I; **market-based finance** for the exploitation and scale-up of European R&I