Funding Innovation - Opportunities for Researchers

With a focus on the EU Green Deal

Eduardo Maldonado

NOVA SCIENCE DAY 2020
22nd SEPTEMBER
Collaborative innovation facilitator

Academia - Industry
COLLABORATION

Technology and knowledge Transfer
COMMERCIALIZATION & INNOVATION
Support/Promote Technological & Industrial Innovation

- Increase industrial investment in R&I;
- Increase knowledge transfer from academia to the Economy;
- Promote favourable conditions towards technology-based entrepreneurship;
- Increase participation of the PT innovation ecosystem in internacional R&I networks;
- Support industry towards capacity-building their in-house R&I
Portugal now belongs to the group of strong innovators of the EU for the first time.

2020 EU Innovation Scoreboard

PORTUGAL
“STRONG INNOVATOR” COUNTRY

12th most innovative country in European Union
1 - Cooperative projects within the Portuguese Structural Funds Programmes (PT2020 and PT2030)

2 - SIFIDE - the industrial tax credit scheme in Portugal

3 - Support to CoLAB and Industrial Intaface centres (CIT)

4 - Portugal in the EU R&I FP
   Horizon 2020
   Horizon Europe
   (Global Challenges and EIC, within PERIN - aiming at doubling EU competitive funding for Portugal 2021-2027)
### TAX CREDITS (INDUSTRY)

**Candidaturas recebidas (n.º)**
- Total: 16,192

**Investimento em I&D declarado (€)**
- Total: 9,398.6M

**Crédito Fiscal solicitado (€)**
- Total: 2,908.0M

**Empresas candidatas (n.º)**
- Total: 4,424

**Média - Investimento em I&D declarado por candidatura (€)**
- Total: 580.4K

**Média - Crédito Fiscal solicitado por candidatura (€)**
- Total: 179.6K

**Candidaturas aprovadas (n.º)**
- Total: 12,620

**Investimento em I&D apurado (€)**
- Total: 5,250.6M

**Crédito Fiscal atribuído (€)**
- Total: 2,348.8M

**Empresas apoiadas (n.º)**
- Total: 3,193

**Média - Investimento em I&D apurado por candidatura (€)**
- Total: 416.1K

**Média - Crédito Fiscal atribuído por candidatura (€)**
- Total: 186.1K

**Taxa de aprovação do investimento* média (%)**
- Total: 66.7%

**Taxa de aprovação do crédito fiscal* média (%)**
- Total: 85.7%

**Taxa de apoio* média (%)**
- Total: 44.7%

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*Investimento em I&D apurado / Investimento em I&D declarado

*Crédito fiscal atribuído / Crédito fiscal solicitado

*Crédito fiscal atribuído / Investimento em I&D apurado
Collaborative Laboratories Network

70 M€ for 2018-2020

32 M€ for 2018-2020
EVOLUTION OF PORTUGUESE PARTICIPATION
PORTUGAL IS A NET BENEFICIARY SINCE 2012

INVESTMENT PT

FP6 2002-2006 1,33%
FP7 2007-2013 1,31%
H2020 2014-2020 1,30%

RETURN PT

1,01% 1,15% 1,66%
PORTUGUESE PARTICIPATION IN H2020 (2014 - 2020)

15120 Proposals
2180 Projects
613 Coordenations
3145 Participants
1040 M€

Higher Education 277M€
Research Centers 386M€
SME 171M€
Large Companies 107M€
Others 95M€

*dados provisórios*
### TOP 10 PORTUGUESE PARTICIPANTS IN H2020

<table>
<thead>
<tr>
<th>Higher Education Institutions</th>
<th>Research Centres</th>
<th>Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Universidade de Lisboa</td>
<td>1. UNINOVA</td>
<td>1. EDP</td>
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<tr>
<td>2. Universidade do Porto</td>
<td>2. IMM</td>
<td>2. SPI</td>
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<tr>
<td>4. Universidade de Coimbra</td>
<td>4. Fundação Champalimaud</td>
<td>4. CNET - Centre for New Energy Technologies</td>
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<td>5. Universidade de Aveiro</td>
<td>5. ICETA</td>
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<tr>
<td>6. Universidade do Minho</td>
<td>6. INL</td>
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<tr>
<td>7. Universidade de Évora</td>
<td>7. NOVA ID FCT</td>
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<tr>
<td>8. Instituto Politécnico do Porto</td>
<td>8. Fciências.ID</td>
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<tr>
<td>10. Universidade dos Açores</td>
<td>10. IBMC</td>
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</table>

563 M€

60 M€

23 participants got 60% of the total EU funding!
EVOLUTION OF PORTUGUESE PARTICIPATION

Financiamento para entidades PT (M€)
Percentagem PT

1.040 M€
EUROPEAN GREEN DEAL CALL 2020

NOW OPEN - CLOSES 26 JANUARY 2021!
The European Green Deal

Transforming the EU’s economy for a sustainable future

- Increasing the EU’s Climate ambition for 2030 and 2050
- Preserving and restoring ecosystems and biodiversity
- From ‘Farm to Fork’: a fair, healthy and environmentally friendly food system
- Building and renovating in an energy and resource efficient way
- Accelerating the shift to sustainable and smart mobility
- A zero pollution ambition for a toxic-free environment
- Supping clean, affordable and secure energy
- Mobilising industry for a clean and circular economy

And leaving no one behind

Designing a set of deeply transformative policies

Our European Growth Strategy
U. v.d. Leyen

THE EU AS A GLOBAL LEADER

A EUROPEAN CLIMATE PACT
### THE EUROPEAN GREEN DEAL CALL

1000 M€ | 19 topics | Focus on big demonstration projects, that produce tangible results - visible to the citizens - in a relatively short time frame

<table>
<thead>
<tr>
<th>Area 1: Increasing Climate Ambition: Cross sectoral challenges</th>
<th>Area 2: Clean, affordable and secure energy</th>
<th>Area 3: Industry for a clean and circular economy</th>
<th>Area 4: Energy and resource efficient buildings</th>
<th>Area 5: Sustainable and smart mobility</th>
<th>Area 6: Farm to Fork</th>
<th>Area 7: Ecosystems and Biodiversity</th>
<th>Area 8: Zero-pollution, toxic free environment</th>
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<tbody>
<tr>
<td>Area 9: Strengthening our knowledge in support of the European Green Deal</td>
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<td>Area 10: Empowering citizens for the transition towards a climate neutral, sustainable Europe</td>
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<td>Area 11: International cooperation</td>
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Launch of call: September 2020  
Deadline: 26 January 2021
TIMELINE AND DATES TO REMEMBER

• Launch of the call: 18 September 2020
• Deadline of the call: 26 January 2021
• Official Launch by the Commission at R&I Days - virtual event 22-24 Sept
• InfoDay dedicated to the EU Green Deal on the 23rd Sept
• Brokerage event dedicated to the EU Green Deal on the 24th Sept

REGISTER and make a pitch with your ideas
MISSION AREAS

Adaptation to climate change, including societal transformation
Board: Helena Freitas, UCoimbra
Assembly: Susana Viegas, ULisboa e Élio Sucena, ULisboa

Healthy oceans, seas, coastal and inland waters
Board: Tiago Pitta e Cunha, Fundação Azul

Cancer
Board: Pedro Pita Barros, UNova
Assembly: Fátima Carneiro, UPorto e Mª Céu Machado, ULisboa

Climate-neutral and smart cities
Board: Paulo Ferrão, IST

Soil health and food
Board: Teresa Pinto Correia, UÉvora
Assembly: Ana Marta Paz, INIAV

CONTRIBUTION OF THE EU GREEN DEAL FOR THE MISSIONS IN HORIZON EUROPE
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)
HORIZON EUROPE | 2021-2027
get ready for the future horizon
HORIZON EUROPE (2021-2027)

Pillar 1
Excellent Science
- European Research Council
- Marie Skłodowska-Curie Actions
- Research Infrastructures

Pillar 2
Global Challenges and European Industrial Competitiveness
- Clusters:
  - Health
  - Culture, Creativity and Inclusive Society
  - Civil Security for Society
  - Digital, Industry and Space
  - Climate, Energy and Mobility
  - Food, Bioeconomy, Natural Resources, Agriculture and Environment
- Joint Research Centre

Pillar 3
Innovative Europe
- European Innovation Council
- European innovation ecosystems
- European Institute of Innovation and Technology

Widening Participation and Strengthening the European Research Area
- Widening participation and spreading excellence
- Reforming and Enhancing the European R&I system

+ missions + partnerships
<table>
<thead>
<tr>
<th>Clusters</th>
<th>Areas of intervention</th>
<th>Clusters</th>
<th>Areas of intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Health</strong></td>
<td>• Health throughout the life course</td>
<td><strong>Climate, Energy and Mobility</strong></td>
<td>• Energy supply</td>
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<td></td>
<td>• Non-communicable and rare diseases</td>
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<td>• Buildings and industrial facilities in energy transition</td>
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<td>• Tools, technologies and digital solutions for health and care, including personalised medicine</td>
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<td>• Clean, safe and accessible transport and mobility</td>
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<td>• Infectious diseases, including poverty-related and neglected disease</td>
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<td>• Energy storage</td>
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<td>• Health care systems</td>
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<td><strong>Culture, creativity and inclusive society</strong></td>
<td>• Democracy and Governance</td>
<td><strong>Food, bioeconomy, natural resources, agriculture and environment</strong></td>
<td>• Biodiversity and natural resources</td>
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<td></td>
<td>• Social and economic transformations</td>
<td></td>
<td>• Seas, oceans and inland waters</td>
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<td>• Bio-based innovation systems in the EU Bioeconomy</td>
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<td><strong>Civil security for society</strong></td>
<td>• Disaster-resilient societies</td>
<td><strong>Digital, Industry and space</strong></td>
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<td></td>
<td>• Protection and Security</td>
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<tr>
<td><strong>Digital, Industry and space</strong></td>
<td>• Manufacturing technologies</td>
<td><strong>Climate, Energy and Mobility</strong></td>
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<td>• Advanced materials</td>
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<td>• Next generation internet</td>
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<td>• Circular industries</td>
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<td>• Space, including Earth Observation</td>
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<td>• Emerging enabling technologies</td>
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<tr>
<td><strong>Climate, Energy and Mobility</strong></td>
<td>• Climate science and solutions</td>
<td><strong>Food, bioeconomy, natural resources, agriculture and environment</strong></td>
<td>• Environmental observation</td>
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<td>• Energy systems and grids</td>
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<td>• Agriculture, forestry and rural areas</td>
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<td>• Communities and cities</td>
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<td>• Circular systems</td>
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<td>• Industrial competitiveness in transport</td>
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<td>• Food systems</td>
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<td>• Smart mobility</td>
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<td><strong>Food, bioeconomy, natural resources, agriculture and environment</strong></td>
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<td></td>
<td>• Food systems</td>
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## HORIZON EUROPE: NOVELTIES

<table>
<thead>
<tr>
<th>Lessons Learned from Horizon 2020 Interim Evaluation</th>
<th>Key Novelties in Horizon Europe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support breakthrough innovation</td>
<td>European Innovation Council</td>
</tr>
<tr>
<td>Create more impact through mission-orientation and citizens' involvement</td>
<td>R&amp;I Missions</td>
</tr>
<tr>
<td>Strengthen international cooperation</td>
<td>Extended association possibilities</td>
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<td>Reinforce openness</td>
<td>Open science policy</td>
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<tr>
<td>Rationalise the funding landscape</td>
<td>New approach to Partnerships</td>
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</tbody>
</table>
HORIZON EUROPE: 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

Institutionalised
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
<table>
<thead>
<tr>
<th>Cluster 1</th>
<th>Cluster 4</th>
<th>Cluster 5</th>
<th>Cluster 6</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>EU-Africa Global Health Partnership</td>
<td>High Performance Computing</td>
<td>Transforming Europe’s rail system</td>
<td>Accelerating farming systems transition: agro-ecology living labs and research infrastructures</td>
<td>Innovative SMEs</td>
</tr>
<tr>
<td>Innovative Health Initiative</td>
<td>Key Digital Technologies</td>
<td>Integrated Air Traffic Management</td>
<td>Animal health: Fighting infectious diseases</td>
<td>European Science Cloud (EOSC)</td>
</tr>
<tr>
<td>European partnership for chemicals risk assessment</td>
<td>Smart Networks and Services</td>
<td>Clean Aviation</td>
<td>Environmental Observations for a sustainable EU agriculture</td>
<td>+ 8 existing EIT KICs</td>
</tr>
<tr>
<td>Pre-clinical/clinical health research</td>
<td>AI, data and robotics</td>
<td>Clean Hydrogen</td>
<td>Rescuing biodiversity to safeguard life on Earth</td>
<td>+ 2023 Cultural and Creative Industries</td>
</tr>
<tr>
<td>Large-scale innovation and transformation of health systems in a digital and ageing society</td>
<td>Clean Steel - Low Carbon Steelmaking</td>
<td>Built environment and construction</td>
<td>A climate neutral, sustainable and productive Blue Economy</td>
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<tr>
<td>Personalised Medicine</td>
<td>European Metrology</td>
<td>Towards zero-emission road transport (ZZERO)</td>
<td>Safe and Sustainable Food System for People, Planet &amp; Climate</td>
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<td>Rare Diseases</td>
<td>Made in Europe</td>
<td>Mobility and Safety for Automated Road Transport</td>
<td>Circular bio-based Europe</td>
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<tr>
<td>+ AntiMicrobial Resistance</td>
<td>Carbon Neutral and Circular Industry</td>
<td>Batteries: Towards a competitive European industrial battery value chain</td>
<td>Water4All: Water security for the planet</td>
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<tr>
<td>+ Pandemic Preparedness</td>
<td>Global competitive space systems</td>
<td>Clean Energy Transition</td>
<td>+ Smart Cities and communities</td>
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</tr>
</tbody>
</table>

+ Zero emission waterborne transport

44+5
The EIC will support innovations with breakthrough and disruptive nature and scale up 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

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)
HORIZON EUROPE: EUROPEAN INNOVATION COUNCIL (EIC)

PATHFINDER: Researchers, technologists

- For radically new technologies emerging from collaborative research
- Grant funding of up to €4 million (100% of costs)
- From proof of concept to demonstration of commercial viability
- Access to EIC coaching and mentoring services
- Majority of funding is open (no predefined themes). Strategic breakthrough technologies are also supported (challenge-based)

ACCELERATOR: Start-ups, SMEs and entrepreneurs

- For development and scaling up of high risk innovations by startups and SMEs
- Grant funding of up to €2.5 million (70% of costs)
- Option of equity investment of up to €15 million
- Access to EIC coaching and mentoring services, pitches with corporates, VCs, etc
- All funding is open (no predefined thematic areas)
Out H2020/HE team!

MAFALDA DOURADO
ANABELA CARVALHO
ALEXANDRE MARQUES
ANA SUTCLIFFE
CRISTIANA LEANDRO
CRISTINA GOUVEIA
MARIA JOÃO FERNANDES
MARTA CANDEIAS
MARGARIDA SANTOS
NATÁLIA DIAS
SOFIA AZEVEDO
FERNANDO CARVALHO
LUÍS MAIA

SUPPORT TO THE HORIZON 2020
INFORM, ADVISE AND CONNECT

Do contact them!