



AGÊNCIA NACIONAL
DE INOVAÇÃO



O Horizonte 2020, e depois?

Ana Sutcliffe | Cristina Gouveia | Maria João Fernandes

IPMA, 13/12/2019



H2020 | OPORTUNIDADES NA TEMÁTICA “MAR E ATMOSFERA”

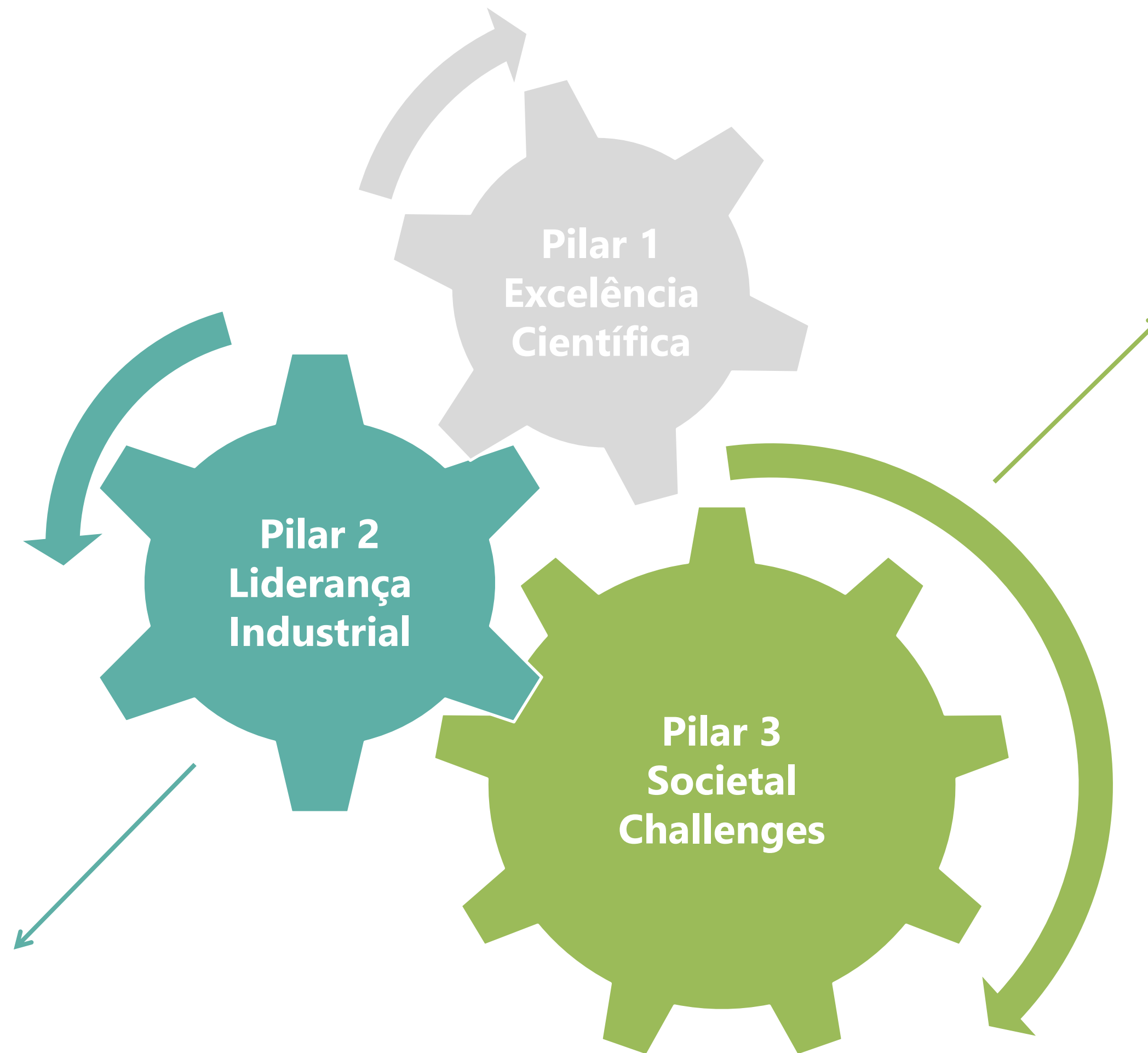
*Nanotechnologies,
Advanced Materials,
Advanced Manufacturing
& Processing and
Biotechnology*

ICT

Space

Access to risk finance

Innovation in SMEs



SC1. Health

SC2. Bioeconomy → BBI

SC3. Energy

SC4. Transports

SC5. Climate Action

SC6. Inclusive societies

SC7. Secure societies





H2020 | OPORTUNIDADES NO ESPAÇO

Referência tópico	Título	Ano	Tipo de projeto	M€ por projeto	Budget (M€)	Deadline
CALL: SPACE 2018-2020						
Earth Observation						
DT-SPACE-01-EO-2018-2020	Copernicus market uptake	2020	IA	1-3	9	5 Mar 2020
LC-SPACE-18-EO-2020	Copernicus evolution – Research activities in support of the evolution of the Copernicus services	2020	RIA	1-1,5	10	5 Mar 2020
LC-SPACE-19-EO-2019	Copernicus evolution – Copernicus evolution: New concept for an innovative and holistic solution for Sentinels calibration & validation	2020	CSA	3	3	5 Mar 2020
LC-SPACE-24-EO-2020	Copernicus evolution: Mission exploitation concept for WATER	2020	CSA	3	3	5 Mar 2020
CALL: EGNSS Market Uptake 2019-2020						
LC-SPACE-EGNSS-1-2019-2020	EGNSS applications fostering green, safe and smart mobility	2020	IA	1-3	10	5 Mar 2020
SU-SPACE-EGNSS-3-2019-2020	EGNSS applications fostering societal resilience and protecting the environment	2020	IA	1-3	4	5 Mar 2020

Espaço



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[Space - WP 2020](#)

PERIN – Portugal in Europe Research and Innovation Network





LC-SPACE-19-EO-2020:

COPERNICUS EVOLUTION – NEW CONCEPT FOR AN INNOVATIVE AND HOLISTIC SOLUTION FOR SENTINELS CALIBRATION & VALIDATION

- **Objetivo geral:** *Pretende-se desenvolver uma nova solução holística para a calibração e validação dos Sentinel*
- **Ideia:** *CSA para definir uma estratégia que englobe as atividades de calibração/validação para os satélites Sentinel existentes e futuros*
- **Impacto:** *Criação de uma rede de agências e institutos que contribuem para estas atividades*
- **Orçamento:** *3 M€, CSA (3 M€ por projeto)*





H2020 | OPORTUNIDADES NO DESAFIO SOCIETAL 2

Segurança Alimentar, Agricultura e Sivicultura Sustentável, Investigação Marítima e Águas Interiores e a Bioeconomia

Referência tópico	Título	Tipo de projeto	M€ por projeto	M€ disponíveis	Concurso	Deadline
CALL SFS - SUSTAINABLE FOOD SECURITY						
From functional ecosystems to healthy food						
SFS-10-2020	Epidemiology of non-regulated contagious animal diseases: from integrated data collection to prioritisation	RIA	10	10	Two-stage	22 Jan 2020
CALL BG - BLUE GROWTH						
BG-07-2019-2020	The future of the Seas and Oceans Flagship Initiative [C] Technologies for observation	IA	9	18	Single-stage	22 Jan 2020
BG-10-2020	Fisheries in the full ecosystem context	RIA	8	16	Two-stage	22 Jan 2020
BG-11-2020	Towards a productive, healthy, resilient, sustainable and highly-valued Black Sea	RIA	8,5	17	Two-stage	22 Jan 2020
CALL RUR – RURAL RENAISSANCE						
CE-RUR-08-2018-2019-2020	Closing nutrient cycles [C] Bio-fertilisers from by-products of the agri-food, fisheries, aquaculture or forestry sectors	IA	8	16	Single-stage	22 Jan 2020
CALL FNR – FOOD AND NATURAL RESOURCES						
CE-FNR-09-2020	Pilot action for the removal of marine plastics and liter	IA	6	12	Single-stage	22 Jan 2020
FNR-11-2020	Prospecting aquatic and terrestrial natural biological resources for biologically active compounds [B] Prospecting aquatic natural biological resources for biologically active compounds	RIA	7,5	15	Two-stage	22 Jan 2020

Bio Economia
BBI
Biotecnologia



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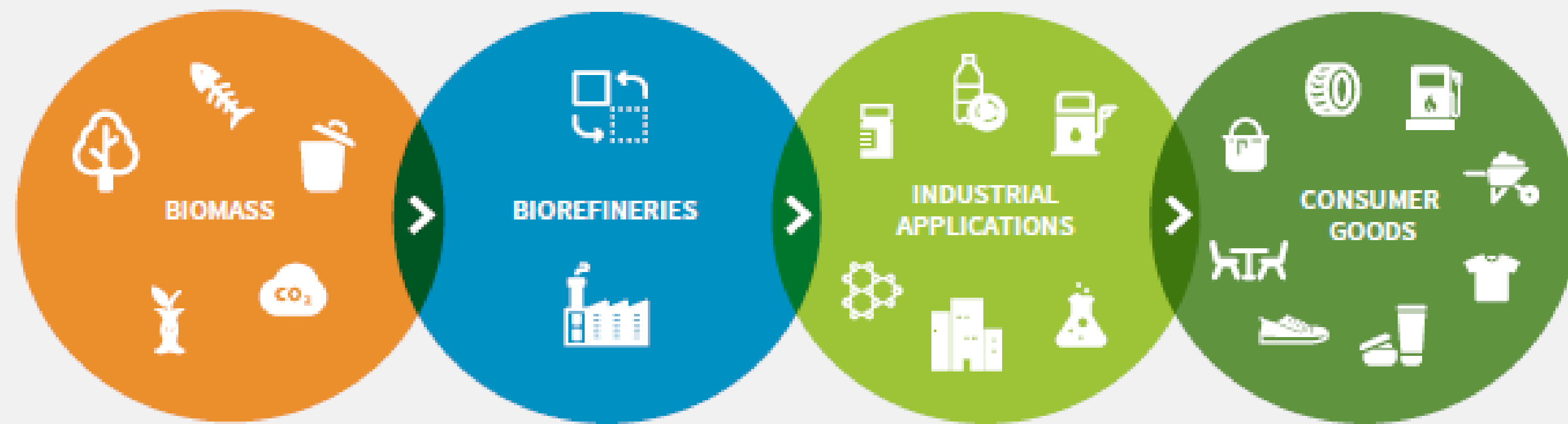
[SC2 - WP 2020](#)



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



BBI JU VALUE CHAIN



- Waste streams
- Multiple organic waste
- By-products & by-streams
- Forestry side-streams
- Dedicated agricultural crops and residues
- Aquatic biomass
- Food processing residues
- Process and waste water
- CO₂

- (Pre-) treatment
- Transformation

- Bioplastics
- Building blocks
- Biopolymers
- Surfactants
- Active ingredients
- Biomaterials
- Biolubricants

- Biofuels
- Textiles
- Packaging
- Solvents
- Furniture
- Cosmetics
- Construction elements
- Pharmaceuticals
- Clothing
- Car components

➤ **Parceria Público-Privada entre a Comissão Europeia e o Consórcio das Bioindústrias (BIC)**

➤ *Opera de acordo com as regras do H2020, com base na Agenda de I&I desenvolvida pela indústria ([SIRA](#))*

CALL H2020-BBI-JTI-2020

Data de publicação: Abril 2020 (tbc)

Deadline: Setembro 2020 (tbc)

Orçamento indicativo: 79 M€ (tbc)

Call single-stage



H2020 | OPORTUNIDADES NO TEMA ENERGIA

DS3 - Energia Segura, Não Poluente e Eficiente

Referência tópico	Título	Tipo de projeto	M€ por projeto	M€ disponíveis	Concurso	Deadline
CALL - BUILDING A LOW-CARBON, CLIMATE RESILIENT FUTURE: SECURE, CLEAN AND EFFICIENT ENERGY						
Global leadership in renewables						
LC-SC3-RES-32-2020	New test rig devices for accelerating ocean energy technology development	RIA	2-5	8	Single-stage	21 Abr 2020

Energia | Transportes
Clean Sky | FCH-JU
SESAR | Shift2Rail



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[SC3 - WP 2020](#)



<http://www.c-energy2020.eu/>



H2020 | OPORTUNIDADES NO TEMA TRANSPORTES

DS4 – Transportes Inteligentes, Ecológicos e Integrados

Referência tópico	Título	Tipo de projeto	M€ por projeto	M€ disponíveis	Concurso	Deadline
CALL MG - MOBILITY FOR GROWTH						
Building a low carbon, climate resilient future: low-carbon and sustainable transport						
LG-MG-1-13-2020	Decarbonising long distance shipping	RIA	5-10	20	Two-stage	9 Jan 2020
Global Leadership and Competitiveness						
MG-3-7-2020	Improved Production Processes in Ship building	IA	4-6	15	Single-stage	21 Apr 2020
Blue Growth						
MG-BG-03-2020	Under water noise mitigation and environmental impact	RIA	8	8	Single-stage	21 Apr 2020

Energia | Transportes
Clean Sky | FCH-JU
SESAR | Shift2Rail



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[SC4 - WP 2020](#)



<https://www.transport-ncps.net/>



H2020 | OPORTUNIDADES NO TEMA AÇÃO CLIMÁTICA

DS5 – Ação Climática, Ambiente, Eficiência de Recursos e Matérias-Primas

Referência tópicos	Título	Tipo de projeto	M€ por projeto	M€ disponíveis	Concurso	Deadline
CALL BUILDING A LOW-CARBON, CLIMATE RESILIENT FUTURE: CLIMATE ACTION IN SUPPORT OF THE PARIS AGREEMENT						
Decarbonisation						
LC-CLA-11-2020	Innovative nature-based solutions for carbon neutral cities and improved air quality	IA	10	30	Two-stage	13 Feb 2020
Climate adaptation, impacts and services						
LC-CLA-12-2020	Advancing climate services	RIA	4-6	22	Two-stage	13 Feb 2020
LC-CLA-13-2020	Climate resilience of European coastal cities and settlements	RIA	10	13	Two-stage	13 Feb 2020
Inter-relations between climate change, biodiversity and ecosystem services						
LC-CLA-14-2020	Understanding climate-water-energy-food nexus and streamlining water-related policies	RIA	3	13	Two-stage	13 Feb 2020
LC-CLA-15-2020	Forest Fires risk reduction: towards an integrated fire management approach in the E.U	RIA	10	10	Two-stage	13 Feb 2020
The Cryosphere						
LC-CLA-17-2020	Polar climate: understanding the polar processes in a global context in the Arctic and Antarctic Regions	RIA	7-8	15	Two-stage	13 Feb 2020
LC-CLA-21-2020	Coordination of European Polar research	CSA	3	3	Single-stage	13 Feb 2020
Knowledge gaps						
LC-CLA-18-2020	Developing the next generation of Earth System Models	RIA	10-12	22	Two-stage	13 Feb 2020
Earth Observation						
LC-CLA-19-2020	Integrated GEOSS climate applications to support adaptation and mitigation measures of the Paris Agreement	RIA	4-5	10	Two-stage	13 Feb 2020
LC-CLA-20-2020	Supporting the implementation of GEOSS in the Arctic in collaboration with Copernicus	RIA	15	15	Two-stage	13 Feb 2020

Apoio a PME
Ação Climática



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[SC5 - WP 2020](#)



Outros tópicos?



FUNDING & TENDER'S PORTAL

The screenshot shows the 'Funding & tender opportunities' portal. Key features are highlighted with red boxes and arrows:

- Public access:** A red box highlights the 'SEARCH FUNDING & TENDERS' menu item.
- EU login:** A red box highlights the 'Register' and 'Login' buttons in the top right corner.

The main content area includes a search bar for 'Find calls for proposals and tenders' and a grid of 'Calls for proposals by EU Programme'. The 'Horizon 2020 Framework Programme (H2020)' is circled in yellow.

ONLINE MANUAL: http://ec.europa.eu/research/participants/docs/h2020-funding-guide/index_en.htm

Calls for proposals by EU Programme						
3rd Health Programme (3HP)	Asylum, Migration and Integration Fund (AMIF)	Consumer Programme (CP)	Creative Europe (CREA)	Erasmus+ Programme (EPLUS)	European Maritime and Fisheries Fund (EMFF)	European Statistics (ESTAT)
HERCULE III (HERC)	Horizon 2020 Framework Programme (H2020)	Internal Security Fund Borders and Visa (ISFB)	Internal Security Fund Police (ISFP)	Justice Programme (JUST)	Pilot Projects and Preparatory Actions (PPPA)	Programme for the Competitiveness of Enterprises and small and medium-sized enterprises (COSME)
Promotion of Agricultural Products (AGRIP)	Research Fund for Coal & Steel (RFC)	Rights, Equality and Citizenship Programme (REC)	Union Civil Protection Mechanism (UCPM)	Programming Period 2007-2013 (FP7 - CIP)	Overview of EU funding	



- **Procura de oportunidades de financiamento** usando palavras-chave
- **Criar/consultar pedidos de 'partner search'** por call/tópico

[ONLINE Manual](#)



CATÁLOGOS DE PROJETOS

EU FUNDED MARINE & MARITIME RESEARCH

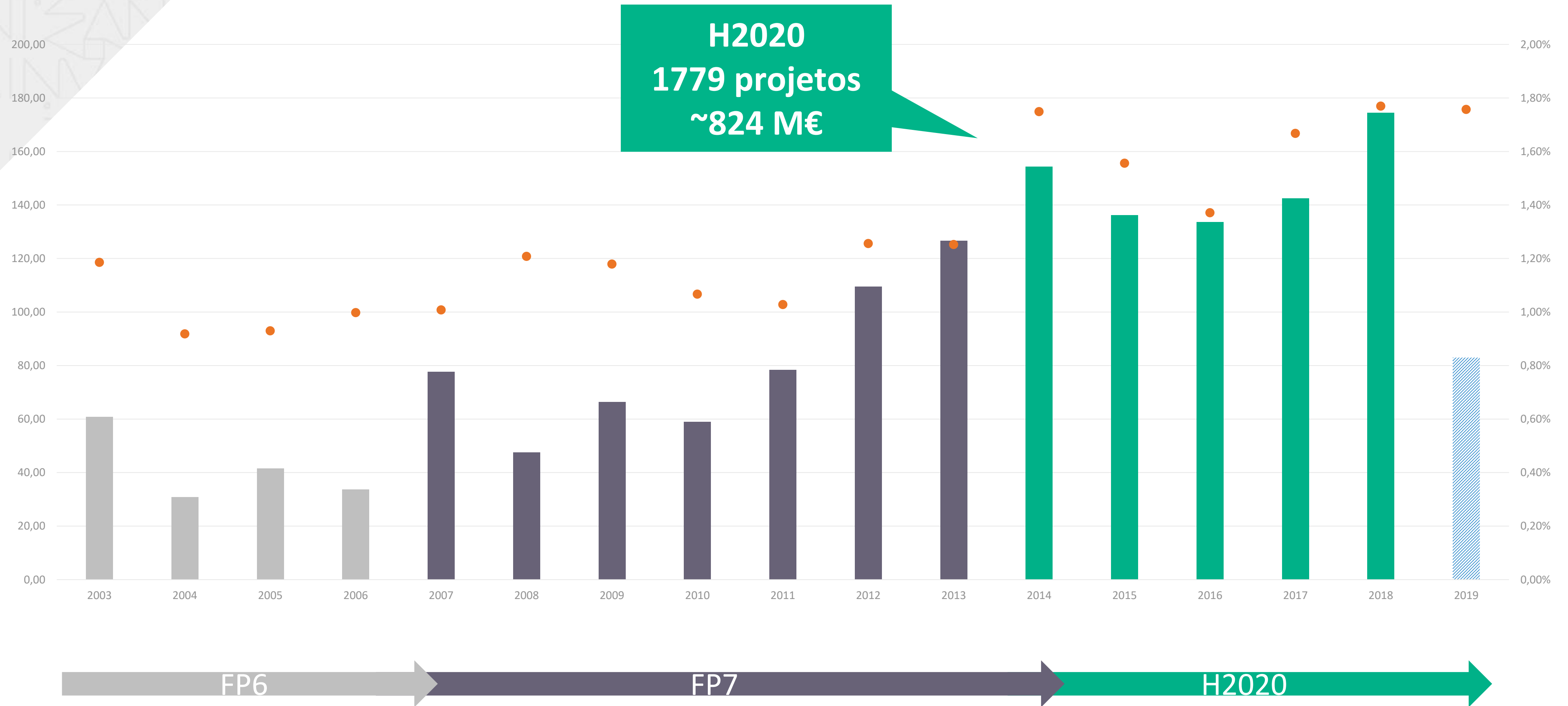


[CORDIS](#)

Encontre parceiros para suas ideias de projetos entre os participantes de projetos anteriores da UE



EVOLUÇÃO DA PARTICIPAÇÃO PT PROGRAMAS-QUADRO DE I&I

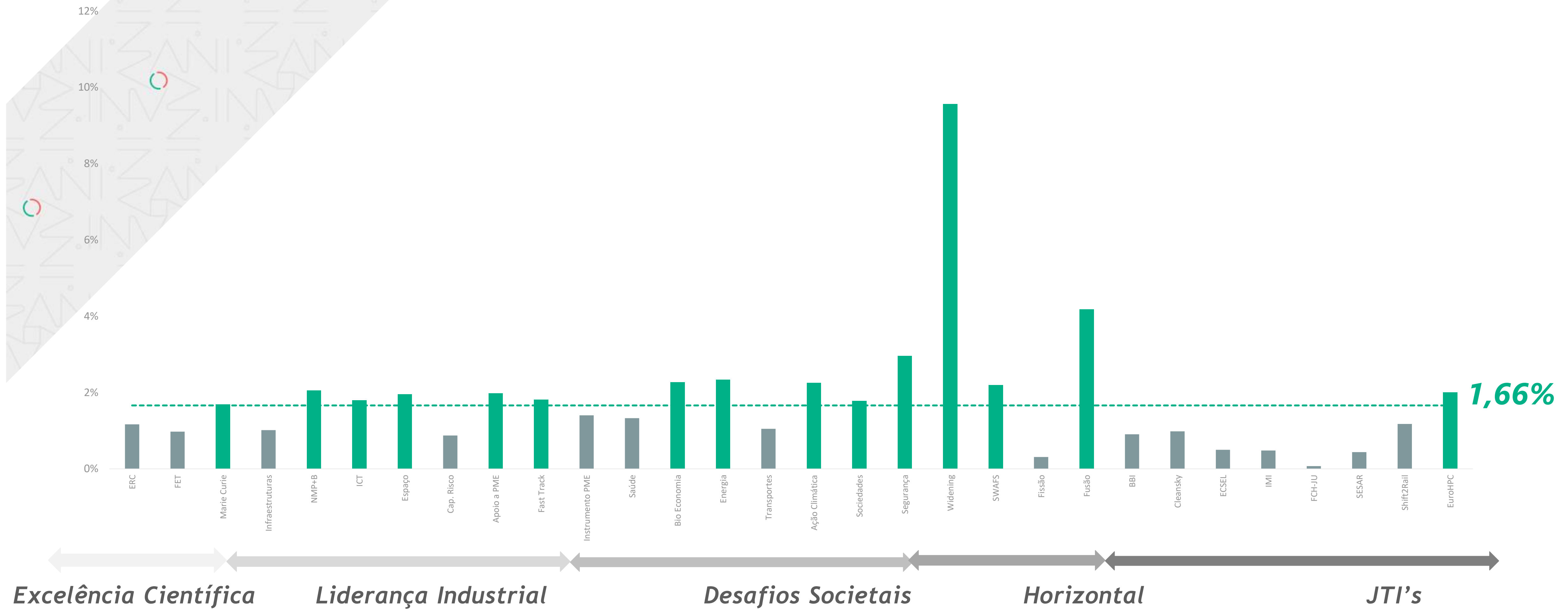


Dados provisórios (Nov 2019)



PARTICIPAÇÃO PT 2014-2019*

PARTICIPAÇÃO POR SUB-PROGRAMA



Dados provisórios (Nov 2019)



CASOS DE SUCESSO DA PARTICIPAÇÃO NACIONAL

PROJETOS COM COORDENAÇÃO PT

SPACE	<u>Co-ReSyF - Coastal Waters Research Synergy Framework</u> (2016-2018)	Coordenador: DEIMOS Nº parceiros: 9 (3 PT) Financiamento p/ entidades PT: 1,4 M€ RIA
SC2. Bioeconomy	<u>SEAFOODTOMORROW - Nutritious, safe and sustainable seafood for consumers of tomorrow</u> (2017-2020)	Coordenador: IPMA Nº parceiros: 35 (4 PT) Financiamento p/ entidades PT: 1,2 M€ IA
	<u>AANChOR - All AtlaNtic Cooperation for Ocean Research and innovation</u> (2018-2022)	Coordenador: FCT Nº parceiros: 17 (5 PT) Financiamento p/ entidades PT: 1.4 M€ CSA
SC3. Energy	<u>WETFEET - Wave Energy Transition to Future by Evolution of Engineering and Technology</u> (2015-2018)	Coordenador: WAVEC Nº parceiros: 13 (3 PT) Financiamento p/ entidades PT: 1 M€ RIA





E o futuro?



Horizon Europe

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

#HorizonEU

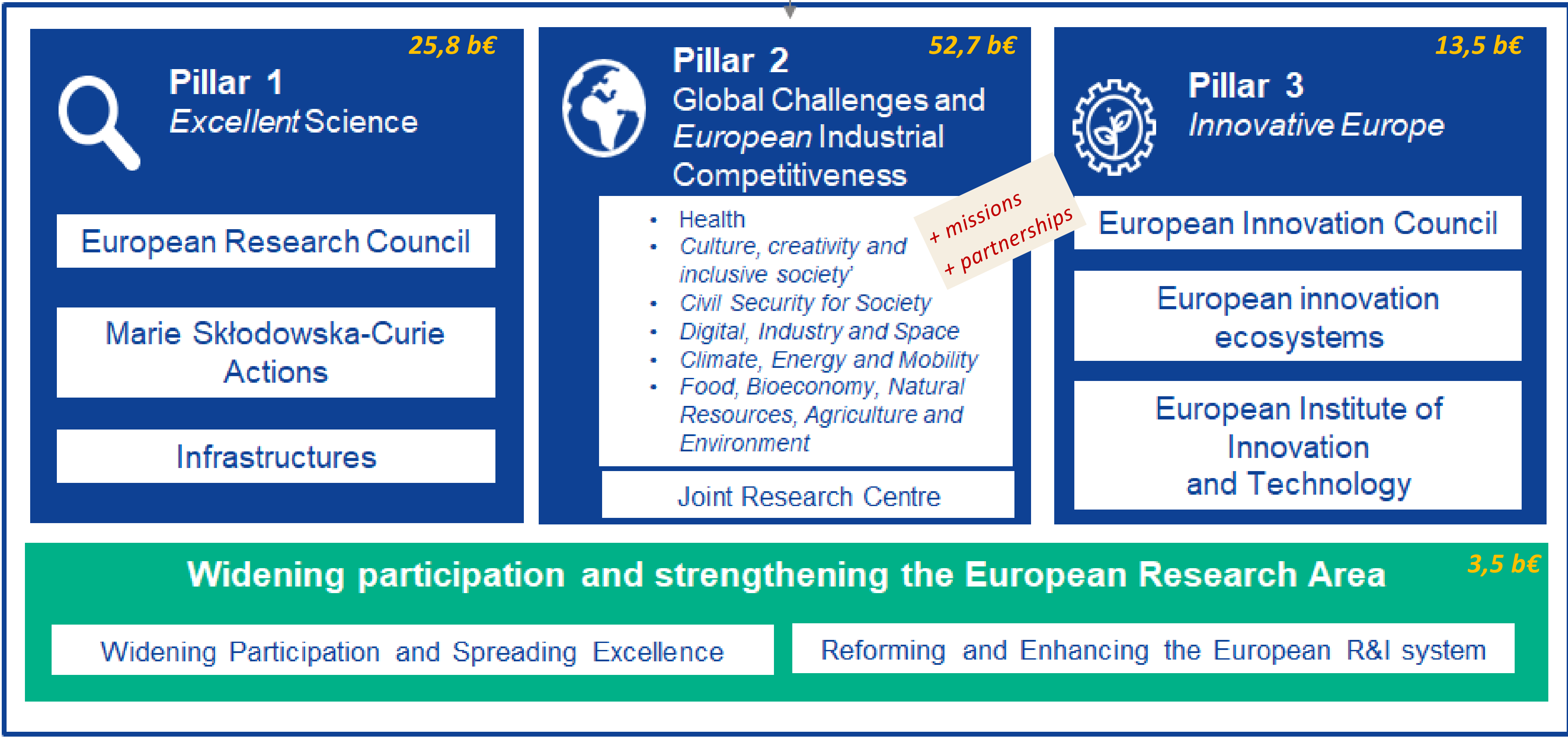
Based on the Commission Proposal for Horizon Europe, a common understanding between co-legislators and a Partial general agreement, both approved in April 2019

Research and
Innovation





HORIZONTE EUROPA | COMO VAI SER?



HORIZON EUROPE
(2021-2027)



Horizon Europe

Clusters in Pillar 2

Clusters	Areas of intervention	
Health	<ul style="list-style-type: none"> • Health throughout the life course • Non-communicable and rare diseases • Tools, technologies and digital solutions for health and care, including personalised medicine 	<ul style="list-style-type: none"> • Environmental and social health determinants • Infectious diseases, including poverty-related and neglected disease • Health care systems
Culture, creativity and inclusive society	<ul style="list-style-type: none"> • Democracy and Governance • Social and economic transformations 	<ul style="list-style-type: none"> • Culture, cultural heritage and creativity
Civil security for society	<ul style="list-style-type: none"> • Disaster-resilient societies • Protection and Security 	<ul style="list-style-type: none"> • Cybersecurity
Digital, Industry and space	<ul style="list-style-type: none"> • Manufacturing technologies • Advanced materials • Next generation internet • Circular industries • Space, including Earth Observation • Emerging enabling technologies 	<ul style="list-style-type: none"> • Key digital technologies, including quantum technologies • Artificial Intelligence and robotics • Advanced computing and Big Data • Low-carbon and clean industry • Emerging enabling technologies
Climate, Energy and Mobility	<ul style="list-style-type: none"> • Climate science and solutions • Energy systems and grids • Communities and cities • Industrial competitiveness in transport • Smart mobility 	<ul style="list-style-type: none"> • Energy supply • Buildings and industrial facilities in energy transition • Clean, safe and accessible transport and mobility • Energy storage
Food, bioeconomy, natural resources, agriculture and environment	<ul style="list-style-type: none"> • Environmental observation • Agriculture, forestry and rural areas • Circular systems • Food systems 	<ul style="list-style-type: none"> • Biodiversity and natural resources • Seas, oceans and inland waters • Bio-based innovation systems in the EU Bioeconomy



Horizon Europe | What's new

Lessons Learned from Horizon 2020 Interim Evaluation



Support breakthrough innovation



Create more impact through mission-orientation and citizens' involvement



Strengthen international cooperation



Reinforce openness



Rationalise the funding landscape



Key Novelties in Horizon Europe

European Innovation Council

R&I Missions

Extended association possibilities

Open science policy

New approach to Partnerships



R&I Missions

PT representatives

**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
Assembly: Ricardo Serrão Santos, UAçores



**Mission
Areas**



Cancer

Board: Pedro Pita Barros, UNova

*Assembly: Fátima Carneiro, UPorto e
M^a 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

Set 2019: 1^a reunião MB

Dez 2019: definição de 1-2 missões

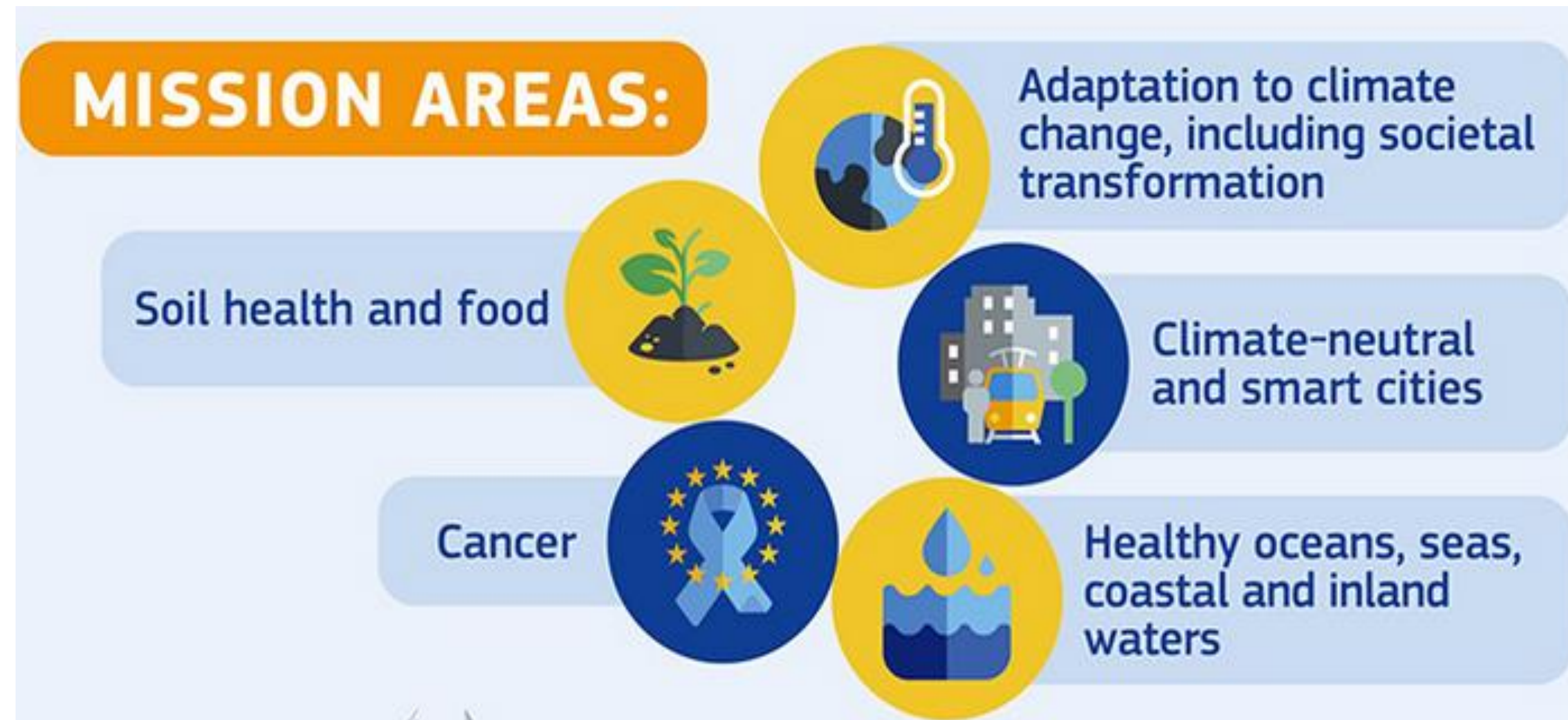


R&I Missions

National Delegates

Maria João Fernandes
Nadine Teles

Patrícia Calado
Natália Dias



Cristina Gouveia
Marisa Borges

Luís Maia
Sofia Azevedo

Ana Sutcliffe
Maria João Fernandes



Rules for participation

Simple and fit for purpose rules

- Further alignment to the Financial Regulation
- Increased use of **simplified forms of grants** where appropriate (building on the H2020 lump sum pilot experience)
- Broader acceptance of **usual cost accounting practices**
- Enhanced **cross-reliance on audits** benefiting beneficiaries taking part in several Union programmes

while ensuring continuity and consistency for beneficiaries by maintaining

- Attractive H2020 funding model, including up to 100% funding rate of direct costs
- Single set of rules principle



Rules for participation

Proposal template

There seems to be no need for drastic changes at this stage. But improvements to be identified. For example:



- *Where feasible, capture information needed to assess the quality of applicants in a structured form;*
- **Reduce the maximum length** of the proposal (e.g. 50 pages);
- *Structured vs non structured proposal.*
- *Allow compatibility for more radical changes (e.g. videos?)*



Rules for participation

Evaluation criteria

*The draft HE rules set the same three award criteria we have in H2020: **‘Excellence’**, **‘Impact’** and **‘Quality and efficiency of the implementation’**. These need to be spelled out, taking into account the lessons learnt:*

- Simplify and reduce the number of ‘aspects to be taken into account’, where possible, ensuring that the same aspect is not assessed twice;*
- Include an assessment of the quality of applicants under ‘implementation’, rather than as a separate binary assessment of operational capacity;*
- Simplify or remove assessment of management structures.*





Rules for participation

Overall overview: 3 Areas of Impact



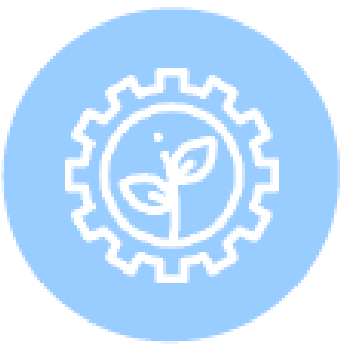
Scientific impact

diffusion of high-quality new fundamental and applied knowledge, skills, training and mobility of researchers, attract talent at all levels, and contribute to full engagement of Union's talent pool in actions supported under the Programme



Societal impact

Generate knowledge, strengthen the impact of R&I in developing, supporting and implementing Union policies, and support the uptake of innovative solutions in industry, notably in SMEs, and society to address global challenges, inter alia the SDGs



Economic/Technological impact

Foster all forms of innovation, facilitate technological development, demonstration and knowledge transfer, and strengthen deployment of innovative solutions



Horizon Europe

Next steps

Summer 2019

Member State **involvement** and contributions, consultation with stakeholders and the general public.

Autumn/winter
2019/2020

Co-creation during Research and Innovation Days, 24 - 26 September.
Involvement of the new European Parliament.
Constitution of the new Commission - expected support for the Strategic Plan

2020

Drafting of the first Horizonte Europa work program based on the Strategic Plan

2021

Beginning of Horizon Europe (Portuguese Presidency in the first half 2021)



GNAD

Grupo Nacional de Apoio à Discussão do Horizonte Europa

Involvement of the national R&I community in the negotiation of Horizon Europe

*The opinion of the national community is fundamental!
We invite you to participate by helping shaping the national position during the discussions. Engage in the debate and join [Grupo Nacional de Apoio à Discussão do Horizonte Europa!](#)*





[Registration Now Open!](#)

*All-Atlantic Ocean Research Forum
Charlemagne Building, Brussels, 6 – 7 February 2020*

Obrigada!

A nossa equipa 😊



CONTACTOS



1. Informamos

2. Aconselhamos

3. Conectamos