Última Call del Programa Marco Horzionte-2020

PhD. Marina Martínez-Garcia
SOST-CDTI, Spanish Office for Science & Technology in Brussels

Dónde estamos?

En la última de H2020 es donde hay más presupuesto asignado!

❑ **Spreading excellence**

❑ **Science for & with Society**

Timming…

Estamos aquí…

Q4-2018 → → Q1-2019 Q2-2019 → → Q4-2019 Q1-2020…

Draft WPs-2020

Formal Approval & Adoption WPs- 2020

Opening calls WP- 2020

Approval of HE proposal by EP & Council

Strategic programming HE parts

Draft 1st calls HE (WPs drafts)

Muy importante participar en la call-2020…

❑ **Anticipación** → **Apertura** a partir de **Jul-2019** y **programas** disponibles **Jun-2019**.

❑ **Estrategia** → Puente hacia el nuevo Programa Marco… ver qué áreas continúan, cuáles aparecen nuevos…

❑ **Networking** → Establecimiento & refuerzo de alianzas y partners con los que trabajar!

Muy importante participar en la call-2020…

Como siempre… contáis con apoyo a diferentes niveles:

- **Local / Institucional** → **Oficina de proyectos EU de la UdC**
- **Regional / Nacional** → Representantes nacionales & NCPs, agencias regionales… pero también **asociaciones, clústers, plataformas nacionales…**
- **Europeo** → Organizaciones Europeas (EC, Agencias,…); **Organizaciones con sede en Bruselas**; Plataformas Tecnológicas EU & Asociaciones sectoriales, regionales (que incluyen regiones europeas), … → **Ir a los infodays, eventos en BRU y otros lugares de EU…**

Cuatro cosas a tener en cuenta Call-2020: Primera…

- **Palabras clave** → "key words" a destacar que aparecen en casi todos los programas, i.e., Inteligencia artificial, … **Focus áreas y orientaciones EC!**

- Personalising health and care
- Sustainable food security
- Blue growth: unlocking the potential of seas and oceans
- Smart cities and communities
- Competitive low-carbon energy
- Energy Efficiency
- Mobility for growth
- Waste: a resource to recycle, reuse and recover raw materials
- Water innovation: boosting its value for EU
- Overcoming the crisis:
- Disaster-resilience
- Digital security

12 focus areas in WP 14-15

- Industry 2020 in the Circular Economy
- Internet of Things
- Smart and Sustainable Cities
- Sustainable Food Security – Resilient and resource-efficient value chains
- Energy Efficiency
- Digital Security
- Blue Growth - Demonstrating an ocean of opportunities
- Competitive Low-carbon Energy
- Automated Road Transport – The New Frontier

9 focus areas in WP 16-17

- Building a **low-carbon, climate resilient** future
- Connecting economic and environmental gains – the **Circular Economy**
- **Digitising** and transforming **European industry** and services
- Boosting the effectiveness of the **Security Union**

4 focus areas in WP 18-20

Cuatro cosas a tener en cuenta Call-2020: Primera…

- **Palabras clave** → "key words" a destacar que aparecen en casi todos los programas, i.e., Inteligencia artificial, … **Focus áreas y orientaciones de la EC!**

The Joint Declaration sets out **seven priority areas**:

1. Better protecting the **security of our citizens**;
2. Reforming and developing our **migration policy** in a spirit of responsibility and solidarity;
3. Giving a new boost to **jobs, growth and investment**;
4. Addressing the **social dimension** of the European Union;
5. Delivering on our commitment to implement a **connected Digital Single Market**;
6. Delivering on our objective of **an ambitious Energy Union and a forward looking climate change policy**; and
7. Further developing the **democratic legitimacy** at EU level.

In addition, the three Presidents agreed to pursue the commitment to common European **values**, democracy and the rule of law; pursue a robust, open and fair **trade policy**; tackle **tax** fraud, tax evasion and tax avoidance; ensure **social** protection and social rights as set out in the Pillar of Social Rights; contribute to stability, **security and peace**; and ensure a high level of **data protection**, **digital rights** and **ethical standards in artificial intelligence** and **robotics**.

Cuatro cosas a tener en cuenta Call-2020: Segunda…

- **Importante conectar con otros programas sinérgicos** a H2020 → COST, Interreg, Urban Innovation Actions (UIAs), Life+, EIT, Programas de cooperación Internacional…. → Fuente alternativa de finaciación, networking (“consortium building”)…

Life

cost

Interreg

eit | European Institute of Innovation & Technology

Cuatro cosas a tener en cuenta Call-2020: Tercera…

- **Innovación, mercado, transferencia**, … → Mayor **cooperación con industria, investigación muy orientada** a resultados para la sociedad, sector privado, … **ATENCIÓN:** El sector público

es muchas veces el cliente final de nuestra investigación!

Cuatro cosas a tener en cuenta Call-2020: Cuarta…

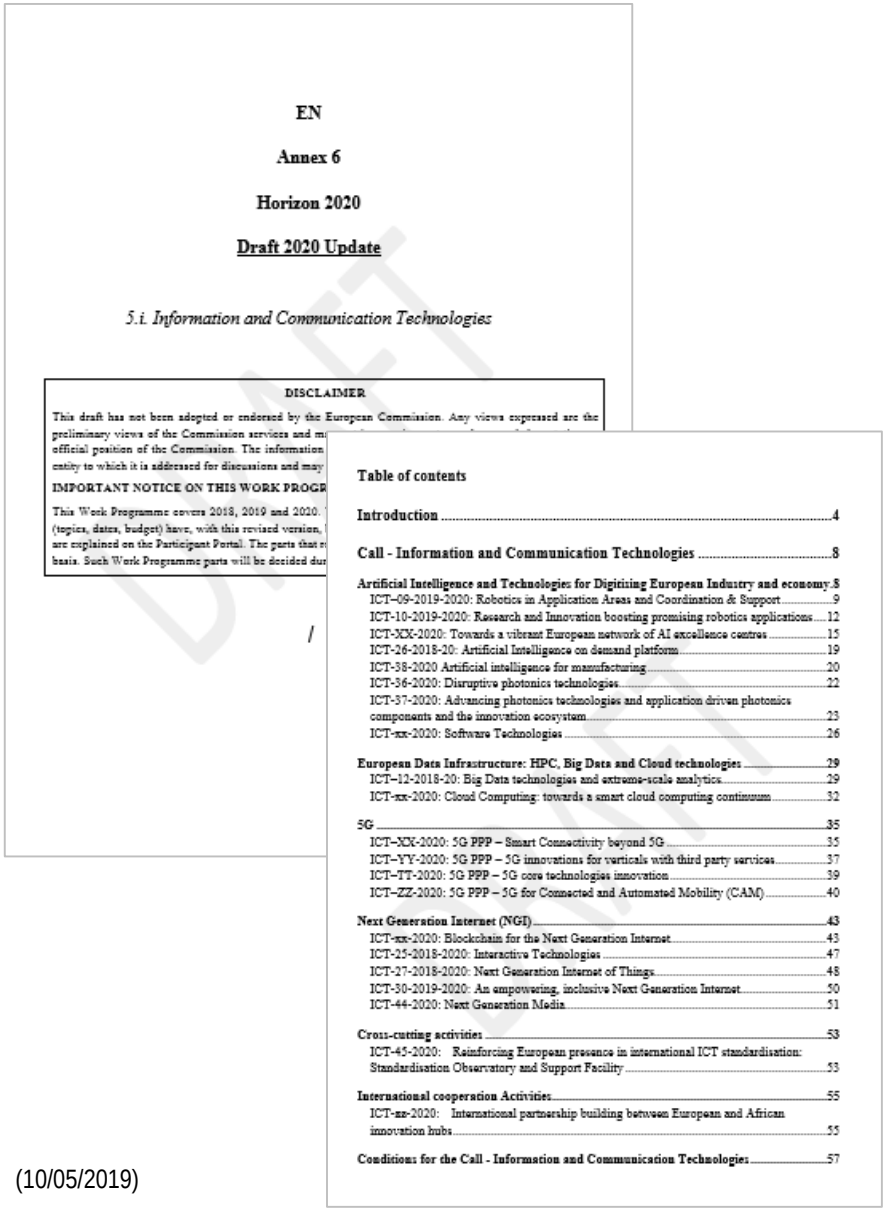
- Ensayo de **nuevos formatos de financiación y desaparecen otros**→ Lump sum, blended instruments, prizes, …

Con todo ello...
Qué podemos encontrar en la última call-2020?

Información detallada a partir de finales de Mayo-2019…

- **Convocatorias competitivas** (a través de los **programas de trabajo**)

- **Grandes Iniciativas-estrategias** (no nesariamente a través de los programas de trabajo), como por ejemplo, los **Partenariados Público-Privados (PPPs).**



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Annex 6

Horizon 2020

Draft 2020 Update

5.i. Information and Communication Technologies

DISCLAIMER

This draft has not been adopted or endorsed by the European Commission. Any views expressed are the preliminary views of the Commission services and m… official position of the Commission. The information … entity to which it is addressed for discussions and may …

IMPORTANT NOTICE ON THIS WORK PROGR…

This Work Programme covers 2018, 2019 and 2020. … (topics, dates, budget) have, with this revised version, … are explained on the Participant Portal. The parts that r… basis. Such Work Programme parts will be decided dur…

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(10/05/2019)

MG-2-7-2019: Safety in an evolving road mobility environment

Specific Challenge: The road mobility environment – the area which covers both road transport users and those affected by them – is evolving. Vehicle types are beginning to change as a result of increasing levels of automation.
[…]

Scope: The scope is to assure the development of robust solutions in the context of the changing environment, leading to dramatic improvements in transport users' and road workers' safety. In order to be properly addressed, traffic safety needs to be articulated in terms that are relevant for the connected and automated transport system.

[…] The Commission considers that proposals requesting a contribution from the EU between EUR 4 and 8 million would allow this specific challenge to be addressed appropriately. Nonetheless, this does not preclude submission and selection of proposals requesting other amounts.

Impact: reduction of at least a 10% (with respect to 2016 figures) in injuries and fatalities in road accidents, contributing to the ambitions of the Transport White Paper's goal to reach close to zero road fatalities by 2050.

Type of Action: Research and innovation action

Los « topics »…

Los programas de trabajo contienen **"topics",** que son cada una de las líneas específicas de financiación y tienen siempre la misma estructura:

- ✓ **What is the problem**
- ✓ What the **project should develop** along its life-time.
- ✓ What the **project should deliver.**
- ✓ **Type of project**

En la última de H2020 de retos sociales & LEIT…

❑ **Spreading excellence**

❑ **Science for & with Society**

Quién puede participar...

Who can participate in H2020 projects?

Overseas Countries and Territories
(OCTs) linked to the ME

Third Countries
listed in the General Annexes

28 Member States
(including their outermost regions)

Associated Countries (AC)

General annexes:
https://ec.europa.eu/research/participants/data/ref/h2020/other/wp/2018-2020/annexes/h2020-wp1820-annex-ga_en.pdf

List of associated countries:
http://ec.europa.eu/research/participants/data/ref/h2020/grants_manual/hi/3cpart/h2020-hi-list-ac_en.pdf

As an organisation, you can participate as a partner or coordinator, receiving upto 100% funding → **Minimum conditions** (for collaborative projects):

- ✓ partners from 3 MMSS or Associated Countries
- ✓ **ATENTION:** International partners does not count in those 3

EU Member States (28)

Associated Countries (16)

Albania
Armenia
Bosnia & Herzegovina
Faroe Islands
Georgia
Iceland
Israel
The former Yugoslav Republic of Macedonia
Republic of Moldova
Montenegro
Norway
Serbia
Tunisia
Turkey
Ukraine
Switzerland

Participación de UK en H2020…

EC Statement: "Please be aware that the eligibility criteria must be complied with for the entire duration of the grant".

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/766510/horizon-2020-government-overview-december-2018-update.pdf

Contact Brexit Negotiations & H2020:

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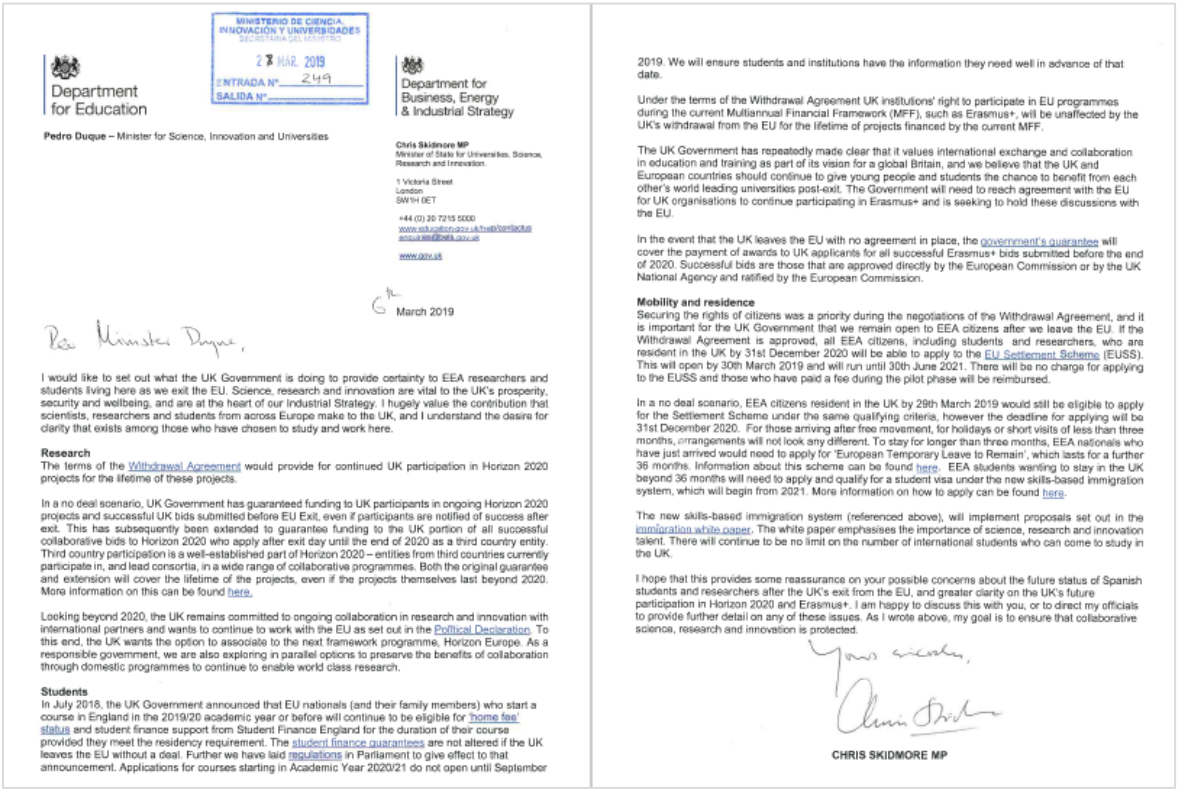
Participación de UK en H2020…



MINISTERIO DE CIENCIA, INNOVACIÓN Y UNIVERSIDADES
SECRETARÍA DEL MINISTRO
27 MAR. 2019
ENTRADA Nº 249
SALIDA Nº

Department for Education

Department for Business, Energy & Industrial Strategy

Pedro Duque – Minister for Science, Innovation and Universities

Chris Skidmore MP
Minister of State for Universities, Science, Research and Innovation.

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www.gov.uk

6th March 2019

Dear Minister Duque,

I would like to set out what the UK Government is doing to provide certainty to EEA researchers and students living here as we exit the EU. Science, research and innovation are vital to the UK's prosperity, security and wellbeing, and are at the heart of our Industrial Strategy. I hugely value the contribution that scientists, researchers and students from across Europe make to the UK, and I understand the desire for clarity that exists among those who have chosen to study and work here.

Research
The terms of the Withdrawal Agreement would provide for continued UK participation in Horizon 2020 projects for the lifetime of these projects.

In a no deal scenario, UK Government has guaranteed funding to UK participants in ongoing Horizon 2020 projects and successful UK bids submitted before EU Exit, even if participants are notified of success after exit. This has subsequently been extended to guarantee funding to the UK portion of all successful collaborative bids to Horizon 2020 who apply after exit day until the end of 2020 as a third country entity. Third country participation is a well-established part of Horizon 2020 – entities from third countries currently participate in, and lead consortia, in a wide range of collaborative programmes. Both the original guarantee and extension will cover the lifetime of the projects, even if the projects themselves last beyond 2020. More information on this can be found here.

Looking beyond 2020, the UK remains committed to ongoing collaboration in research and innovation with international partners and wants to continue to work with the EU as set out in the Political Declaration. To this end, the UK wants the option to associate to the next framework programme, Horizon Europe. As a responsible government, we are also exploring in parallel options to preserve the benefits of collaboration through domestic programmes to continue to enable world class research.

Students
In July 2018, the UK Government announced that EU nationals (and their family members) who start a course in England in the 2019/20 academic year or before will continue to be eligible for 'home fee' status and student finance support from Student Finance England for the duration of their course provided they meet the residency requirement. The student finance guarantees are not altered if the UK leaves the EU without a deal. Further we have laid regulations in Parliament to give effect to that announcement. Applications for courses starting in Academic Year 2020/21 do not open until September 2019. We will ensure students and institutions have the information they need well in advance of that date.

Under the terms of the Withdrawal Agreement UK institutions' right to participate in EU programmes during the current Multiannual Financial Framework (MFF), such as Erasmus+, will be unaffected by the UK's withdrawal from the EU for the lifetime of projects financed by the current MFF.

The UK Government has repeatedly made clear that it values international exchange and collaboration in education and training as part of its vision for a global Britain, and we believe that the UK and European countries should continue to give young people and students the chance to benefit from each other's world leading universities post-exit. The Government will need to reach agreement with the EU for UK organisations to continue participating in Erasmus+ and is seeking to hold these discussions with the EU.

In the event that the UK leaves the EU with no agreement in place, the government's guarantee will cover the payment of awards to UK applicants for all successful Erasmus+ bids submitted before the end of 2020. Successful bids are those that are approved directly by the European Commission or by the UK National Agency and ratified by the European Commission.

Mobility and residence
Securing the rights of citizens was a priority during the negotiations of the Withdrawal Agreement, and it is important for the UK Government that we remain open to EEA citizens after we leave the EU. If the Withdrawal Agreement is approved, all EEA citizens, including students and researchers, who are resident in the UK by 31st December 2020 will be able to apply to the EU Settlement Scheme (EUSS). This will open by 30th March 2019 and will run until 30th June 2021. There will be no charge for applying to the EUSS and those who have paid a fee during the pilot phase will be reimbursed.

In a no deal scenario, EEA citizens resident in the UK by 29th March 2019 would still be eligible to apply for the Settlement Scheme under the same qualifying criteria, however the deadline for applying will be 31st December 2020. For those arriving after free movement, for holidays or short visits of less than three months, arrangements will not look any different. To stay for longer than three months, EEA nationals who have just arrived would need to apply for 'European Temporary Leave to Remain', which lasts for a further 36 months. Information about this scheme can be found here. EEA students wanting to stay in the UK beyond 36 months will need to apply and qualify for a student visa under the new skills-based immigration system, which will begin from 2021. More information on how to apply can be found here.

The new skills-based immigration system (referenced above), will implement proposals set out in the immigration white paper. The white paper emphasises the importance of science, research and innovation talent. There will continue to be no limit on the number of international students who can come to study in the UK.

I hope that this provides some reassurance on your possible concerns about the future status of Spanish students and researchers after the UK's exit from the EU, and greater clarity on the UK's future participation in Horizon 2020 and Erasmus+. I am happy to discuss this with you, or to direct my officials to provide further detail on any of these issues. As I wrote above, my goal is to ensure that collaborative science, research and innovation is protected.

Yours sincerely,

Chris Skidmore

CHRIS SKIDMORE MP

En un escenario sin acuerdo, el gobierno de UK ha garantizado la financiación a los participantes de dicho país en los proyectos en curso de H2020 y propuestas presentadas antes de la salida de la UE, incluso si se notifica a los participantes sobre el éxito después de la salida.

Tipos de proyectos en H2020…

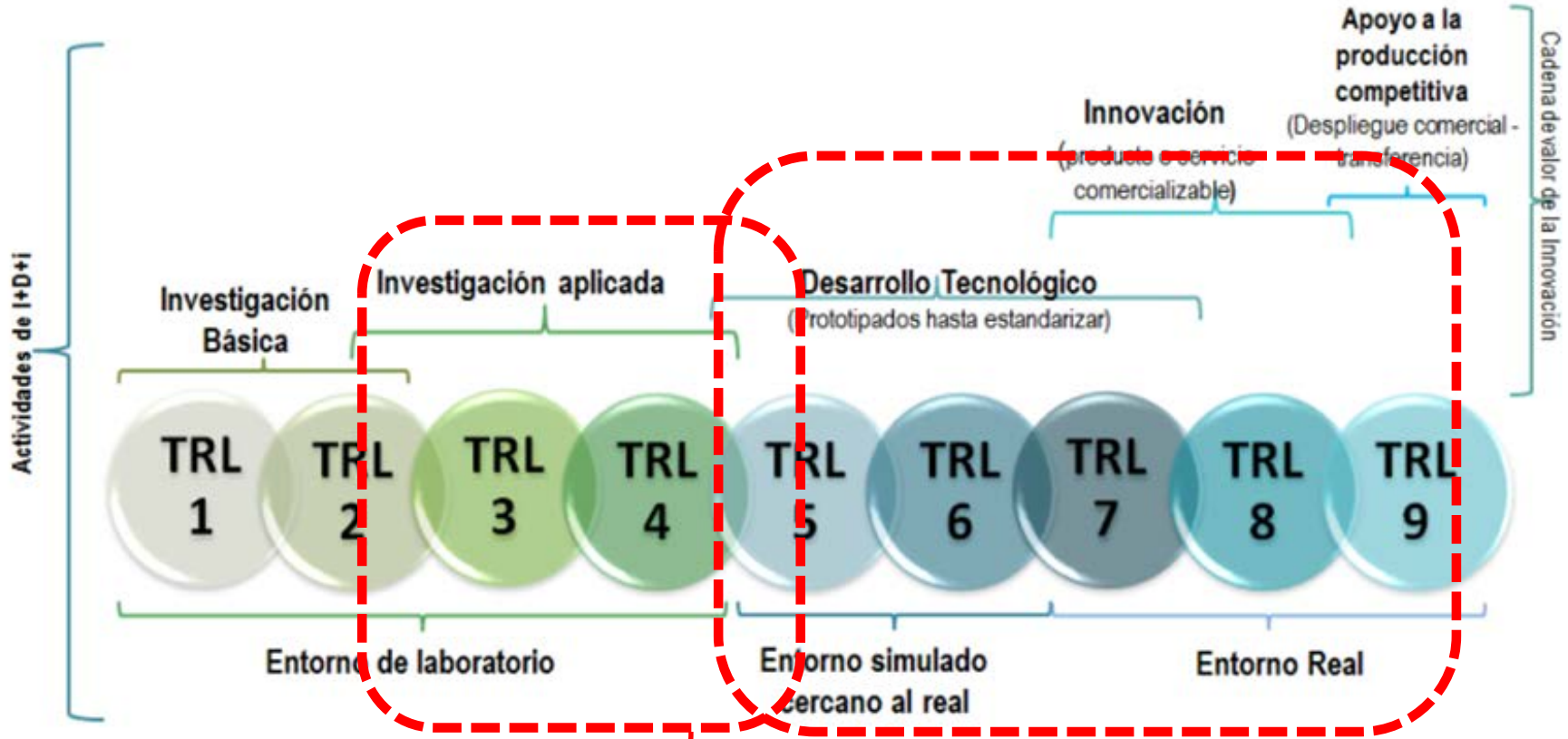
Funding instruments 2020

- ✓ **Research and Innovation Action (RIA)**
- ✓ **Innovation Action (IA)**
- ✓ **Coordination and Support Action (CSA)**
- ✓ **SME Instrument**

Pre-Commercial Procurement Cofund (PCP)

- ✓ **Fast Track to Innovation Pilot**

Tipologías de proyectos en los Pilares – II & III



Resarch & Innovation actions (IA)

- ✓ **Innovation Actions (IA)**
- ✓ **SMEs / FTI**
- ✓ **PCP**

Research and Innovation Action (RIA)

- **Objetive**: To develop new knowledge or well to explore the feasibility of a new technology, service or solution.

It may include fundamental and applied research, technology development and integration, testing and validation of a prototype at small scale in a laboratory or simulated environment.

Applied Research

- **Funding**: Upto **100%** of the eligible costs

- **Eligibility criteria: Three independent legal entities** based in 3 different Member States or Associated Countries.

Innovation Action (IA)

- **Objetive:** To produce plans, structures or to design new products, processes and enhanced or improved services.

It may include prototyping, testing, demonstrations, pilots, validation and large scale and market replication.

- **Funding**: Upto **70%** of the eligible costs, BUT upto 100% for non-profit organisations.

- **Eligibility criteria:**

Three independent legal entities

based in 3 different Member States or Associated Countries.

Coordination and Support Action (CSA)

- **Consists on**: Accompanying measures such as normalisation, dissemination and communication, networkg creation, support services, dialogues on policies, exercises and studies for mutual learning, complementary activities such as strategic planning, coordination of networks among different countries,…

- **Funding**: Upto **100%** of the eligible costs

- **Eligibility criteria: One legal entity** based in a Member State or Associated Country.

SMEs Instrument

- **Description**: Instrumento for innovative SMEs aiming to growth and to go International.

- **Funding**: Upto **70%** of the eligible costs
  - Phase-1 → Lump Sum of 50 k€ and duration of 6 months → **Última oportunidad 05-Sep-2019 y después… desaparece!**
  - Phase-2 → 0,5-2,5 M€ EC requested and project upto 2 years

ATENCION:

- ✓ **A partir 2018** la evaluación ha cambiado con **templates nuevas** y **entrevista en BRU…** con sólo pocos días para prepararla!
- ✓ **A partir de 09-Oct-2019** cambia el formato subvención → **Subvención + instrumento financiero (blending)**

  - Phase-3 Business support & acceleration services → No funding only support inmatchmaking events & exhibitions, Industry Days, etc.. by the EEN.

- **Eligibility:** SMEs from the MMSS or Associated countries.

Fast Track to Innovation (FTI)

- **Description**: Small collaborative project (3-5 partners of ≈2 M€ EC requested) aiming to **bring to market an innovative solution/product in less than 3 years**. No basic research but innovation, development, integration, test at real scale, market approach, etc
- Industrial focus: **From TRL ≥ 6 → Final TRL = 9**
- **Funding**: Upto **70%** of eligible costs (100% for non-profit)
- **Eligibility:** All public or private entity. Min 3 entities from 3 MMSS or associated countries and, at least, 60% of Budget going to industry.
- Coordinator NO start-up (economic check compulsory).

NB: *3 Cut-offs a year and fully bottom-up.*

ATENCIÓN: Sigue igual hasta finales de 2020… pero desaparece en Horizonte Europe como tal!!!!

Además… Inducement Prizes

The Prizes

Horizon Prizes are challenge prizes (also known as 'inducement' prizes) which offer a cash reward to whoever can most effectively meet a defined challenge

Social Innovation

The contest has been launched and you can apply until 28 February 2019

CO_2 reuse prize

The contest has been launched and you can apply until 3 April 2019

Low carbon hospital

The contest has been launched and you can apply until 3 April 2019

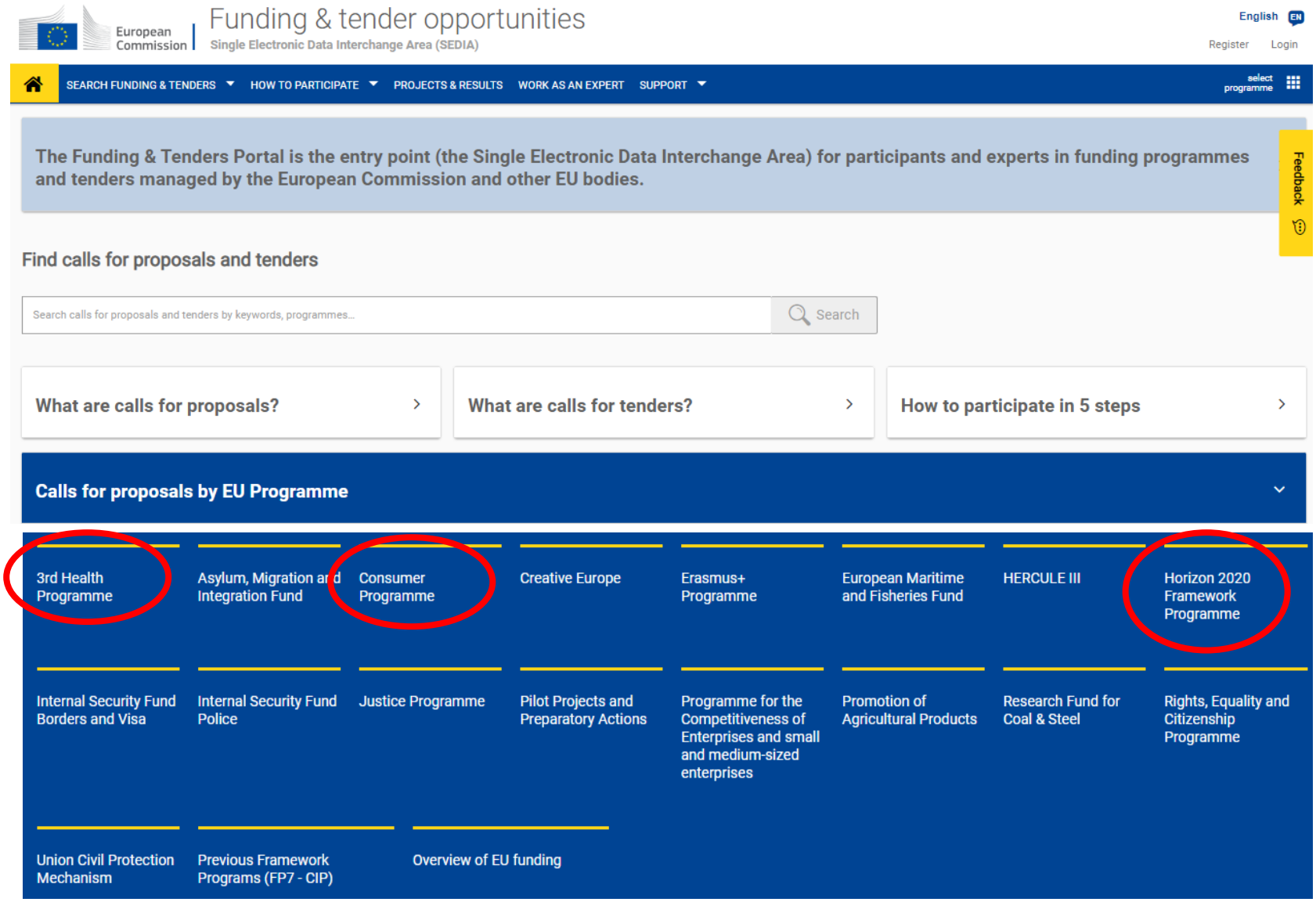
Cleanest engine of the future

The contest has been launched and you can apply until 20 August 2019

https://ec.europa.eu/research/horizonprize/index.cfm?pg=prizes

Dónde encontrar la información?

New participant portal onwards Call-2019…



(10/05/2019)

HEALTH...

Estructura Health call-2020

Better Health and care, economic growth and sustainable health systems

- Personalised medicine
- Innovative health care & care Industry
- Infectious diseases & improving global health
- Innovative health & care systems – Integration of care
- Decoding the role of environment for health & well being

Digital transformation in Health and Care

Trusted digital solutions and Cybersecurity in Health and Care

CyberSecurity aspects!!!!

Ejemplos de topics de interés…

- **SC1-BHC-06-2020: Digital diagnostics** – developing tools for supporting clinical decisions by integrating various diagnostic data
- **SC1-BHC-29-2020:** Innovative actions for improving **urban health and wellbeing** - addressing environment, climate and socioeconomic factors
- **SC1-BHC-36-2020: Micro- and nano-plastics** in our environment: Understanding exposures and impacts on human health
- **SC1-DTH-02-2020:** Personalised early risk prediction, prevention and intervention based on **Artificial Intelligence and Big Data technologies**
- **SC1-DTH-10-2019-2020: Digital health and care services**
- **SC1-DTH-13-2020:** Implementation research for scaling up and transfer of innovative solutions involving **digital tools for people-centred care**
- **SC1-HCC-08-2020:** Scaling up innovation for **active and healthy ageing**
- **DT-ICT-12-2020:** AI for the smart **hospital of the future**
- **DT-TDS-04-2020:** AI for Genomics and Personalised Medicine
- **DT-TDS-05-2020: AI for Health Imaging**

Eventos próximos…

Save the date! Open Info Day, Horizon 2020 - 'Health, demographic change and wellbeing'

3 July 2019, Brussels (Charlemagne building), Belgium

Add to your e-Calendar Go to the main events calendar to see all forthcoming events

Share 1

With the principle of 'better health for all' at its core, Horizon 2020's Societal Challenge 1 (Health, demographic change and wellbeing) focuses on:

- personalised health and care
- infectious diseases and improving global health
- innovative and sustainable health systems
- decoding the role of the environment (including climate change) for health and wellbeing
- digital transformation
- cybersecurity in health and care

Horizon 2020 Societal Challenge 1 work programme for 2020 (2020 Health calls) will be expected to offer calls for proposals with an overall budget of about €650 million. Funding opportunities will be presented at the Open Info Day on 3 July.

Registrationss will open shortly on this website.

Related to the Open Info Day, but as a separate event, the EU-funded project **Health-NCP-Net 2.0** is organizing a free of charge Partnering Event on 4 July in Brussels which is meant to assist you in finding the right project partners for the upcoming 2020 Health calls.

Registration via the NCP website will open shortly.

FOOD...

Estructura Health call-2020

Sustainable Food Security

From functional ecosystems to healthy food

Environment and climate-smart food production and consumption

Building capacities

Targeted international cooperation

Blue Growth

Rural Renaissance

From farm to society: understanding dynamics and modernising policies

Organising sustainable food and non-food value chains under changing conditions

Taking advantage of the digital revolution

Boosting innovation and enhancing the human and social capital in rural areas

Palabras clave…

- **Agricultura (ganadería) y silvicultura sostenibles**
  - Incrementar la eficacia productiva y hacer frente al cambio climático al tiempo que se garantizan la sostenibilidad y la capacidad de recuperación
  - Proporcionar servicios ecosistémicos y bienes públicos
  - Más poder para las zonas rurales, apoyo a las políticas e innovación rural
- **Sector agroalimentario competitivo y sostenible para una dieta sana y segura**
  - Decisiones informadas por parte del consumidor
  - Alimentos y dietas saludables y seguros para todos (Nutrición y seguridad alimentaria)
  - Un sector agroalimentario sostenible y competitivo (Procesado en industrias)
- **Desbloquear el potencial de los recursos acuáticos vivos (Pesca y Acuicultura)**
  - Desarrollar un sector pesquero sostenible y respetuoso con el medio ambiente
  - Impulsar la innovación marina por medio de la biotecnología
- **Bioindustrias sostenibles y competitivas**
  - Promover la bioeconomía y las bioindustrias
  - Desarrollar biorrefinerías integradas
  - Apoyar el desarrollo de un mercado para los bioproductos y bioprocesos

FOOD 2030 - Priorities

NUTRITION for sustainable and healthy diets

CLIMATE smart and environmentally sustainable food systems

CIRCULARITY and resource efficiency of food systems

INNOVATION and empowerment of communities

FOOD 2030 - Drivers

Research breakthroughs → ICT, Food systems science & transdisciplinarity

Innovation and Investment → Regional, Private sector collaboration, open innovation

Open Science-> Open access and data sharing; engagement, education & skills

International collaboration → Partnering with Member States, International Bio-economy Forum

Ejemplos de topics de interés…

- **LC-SFS-22-2020:** Forest soils Research and Innovation Action
- **LC-RUR-11-2019-2020:** Sustainable wood value chains

- **BG-07-2019-2020:** The Future of Seas and Oceans Flagship Initiative

Estructura Health call-2020

Horizon 2020 Info Day on Societal Challenge 2 calls for proposals of 2020

Venue:

Brussels, Charlemagne building, Rue de la Loi 170, 1040, Bruxelles

Thursday, 4 July, 2019

Come and learn about the Societal Challenge 2 calls for 2020 and get some practical information on how to successfully apply to the open calls for proposals.

This event is organised together with the brokerage event organised on **3 July 2019** by the BIOHORIZON project. More information and registration are available here.

This information day is an opportunity for attendees to get some insight into the Societal Challenge 2 calls for proposals of Horizon 2020, for the Work Programme of 2020, covering Food security, sustainable agriculture and forestry, marine and maritime and inland water research and the bioeconomy.

This Info Day targets potential applicants of the calls for proposals published under the Societal Challenge 2 Work Programme for 2018- 2020.

Registration for the event is free of charge and compulsory. However, due to limited space, applications will be accepted on a first-come-first-served basis. Registrations will open in May 2019. Travel and subsistence costs should be covered by the participants.

All sessions will be webstreamed and recorded, and presentations will be published after the event.

The links to the webstreaming will be live on 4 July 2019 from 9:30 onwards.

ENERGY…

DRAFT

Estructura Energy 2020

Building a Low-Carbon, Climate Resilient Future:
Secure, Clean & Efficient Energy

ENERGY EFFICIENCY

GLOBAL LEADERSHIP IN RENEWABLES

SMART & CLEAN ENERGY FOR CONSUMERS

SMART CITIZEN-CENTRED ENERGY SYSTEM

SMART CITIES AND COMMUNITIES

ENABLING NEAR-ZERO CO2 EMISSION FROM FOSIL FUEL POWER PLANTS AND CARBON INTENSIVE INDUSTRIES

JOINT ACTIONS AMONG COUNTRIES

CROSS-CUTTING ISSUES

Transforming the energy sector through digitisation

Other Actions

Ejemplos de topics de interés…

LC-SC3-SCC-1-2018-2019-2020: Smart Cities and Communities

- Demo projects (living labs), district size, collaborating intensively in steadily growing Lighthouse group.
- Creation of energy smart communities that serve as seeding points for local energy transition
- Long-term plans/vision (2050 narrative) for decarbonising the energy system.

Conexión Smart City con Greening Cities & Circular Economies in Cities, etc…

Sobre smart cities...

ABOUT

The 2019 General Assembly will offer a unique opportunity for Smart city actors t
exchange best practices, present projects, find partners, and stimulate discussion
helping the development of innovative ideas.

RELATED TAGS

Energy

Mobility & Transport

ABOUT

KEY INFORMATION

Linked Cities:
Brussels

USEFUL LINKS

The Digital Cities Challenge Conference - A Strategy for EU Cities in the 21st ...

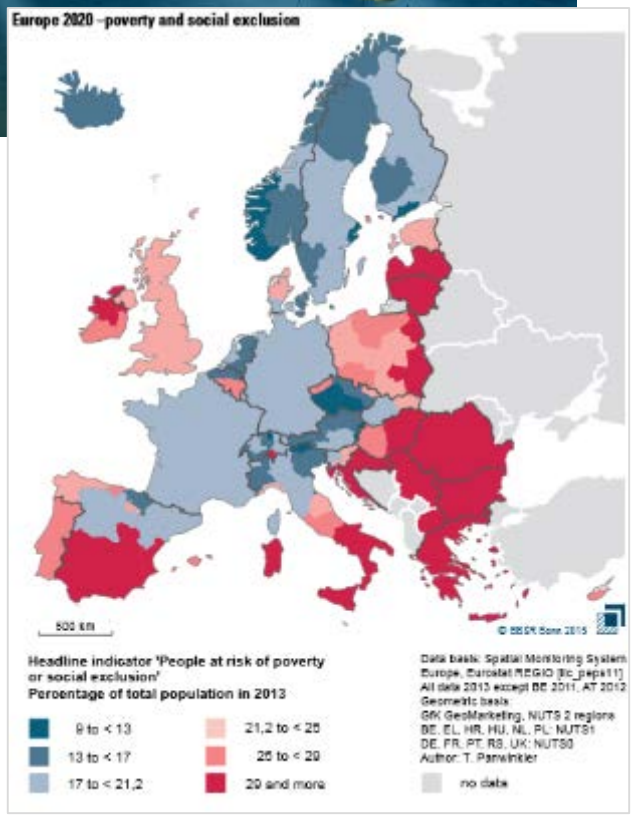
Ejemplos de topics de interés…

- **LC-SC3-EE-1-2018-2019-2020:** Decarbonisation of the EU building stock: innovative approaches and **affordable solutions changing the market for buildings renovation**
- **LC-SC3-EE-3-2019-2020:** Stimulating demand for sustainable energy **skills in the construction sector**

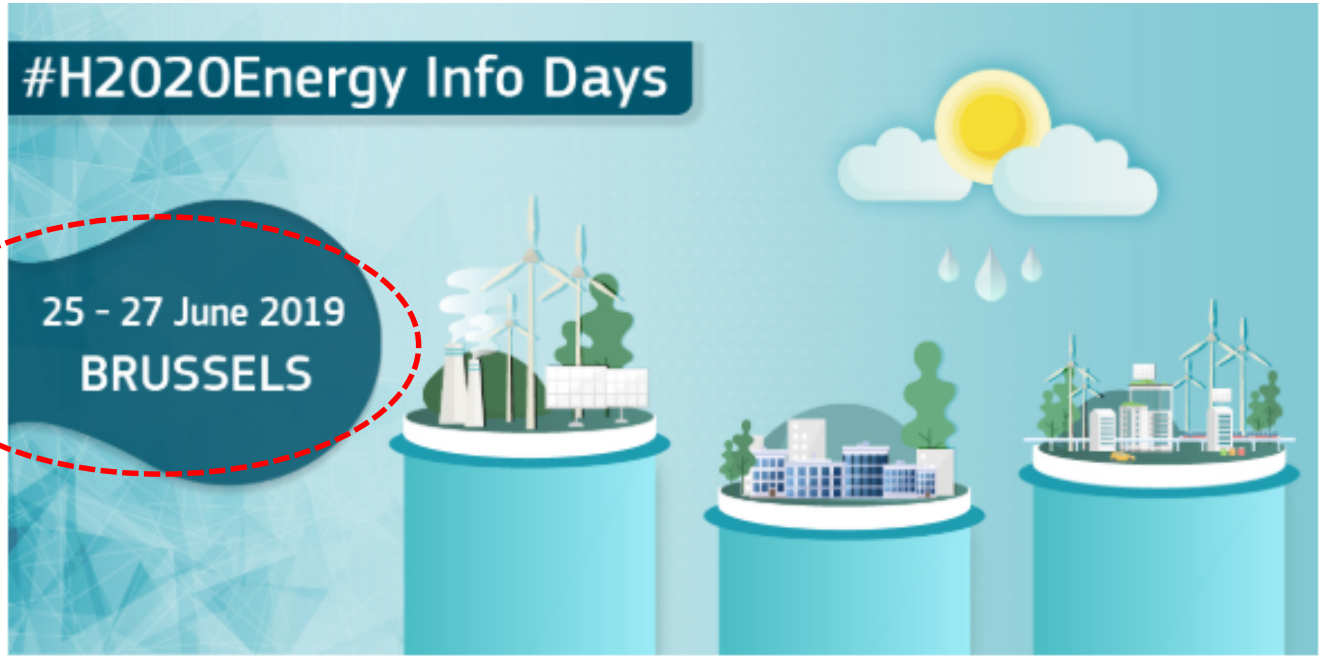
- **LC-SC3-EE-4-2019-2020: Upgrading smartness** of existing buildings through **innovations for legacy equipment**
- **LC-SC3-EE-5-2018-2019-2020:** Next-generation of Energy Performance Assessment and Certification
- **LC-SC3-B4E-5-2020:** Integrated design concepts for **energy-efficient ICT in buildings**
- **LC-SC3-B4E-6-2020: Big data for buildings**
- **LC-SC3-B4E-7-2020:** EU **building stock data 4.0**

Ejemplos de topics de interés…

- **LC-SC3-RES-31-2020:** Basic science technology development for **offshore wind**
- **LC-SC3-RES-32-2020:** New test rig devices for accelerating **ocean energy technology development**
- **LC-SC3-RES-19-2020:** Demonstration of innovative technologies for **floating wind farms**
- **LC-SC3-RES-27-2020:** Demonstration of advanced **biofuels production from aquatic biomass**
- **LC-SC3-EC-1-2018-2019-2020:** The role of consumers in changing the market through informed decision and collective actions
- **LC-SC3-EC-2-2018-2019-2020:** Mitigating **household energy poverty**



(10/05/2019)



The Horizon 2020 Energy info days will take place on 25-26-27 June in Brussels. They will present the funding opportunities for research, innovation and market uptake projects on clean energy.

The event will help potential applicants in preparing successful proposals for Horizon 2020 calls for the year 2020.

Registrations

Registrations are open.

Please click here to register.

Brokerage event

A brokerage event, organised by the Horizon 2020 Energy National Contact Points, will be part of the Info Days and give you the opportunity to network and look for partners to form a consortium.

TRANSPORT...

DRAFT

Estructura Mobility 2020

Mobility for Growth

Low Carbon Sustainable Transport

Safe, Intergrated & Resilient Transport Systems

Global Lidership & Competitiveness

Accounting for people

MG-4-7-2020: Digitalisation of the transport system: data sharing

Blue Growth

Liderado por sector automóvil…

Digitalizing & Transforming EU Industry & Services: Automated Road Transport

Building a Low Carbon Resilient Future: Green Vehicle

Palabras clave…

- **Un transporte eficiente en el uso de los recursos y que respeta el medio ambiente**
  - Lograr que aviones, vehículos y barcos sean más limpios y silenciosos mejorará el impacto ambiental y reducirá la vibración y el ruido percibidos
  - Desarrollar equipamientos, infraestructuras y servicios inteligentes
  - Mejora del transporte y la movilidad en las zonas urbanas

- **Mejor movilidad, menor congestión, mayor seguridad**
  - Una disminución sustancial de la congestión del tráfico
  - Mejoras sustanciales de la movilidad de personas y mercancías
  - Desarrollo y aplicación de nuevos conceptos de transporte de mercancías y logística
  - Reducción de las tasas de accidentes y el número de víctimas mortales y mejora de la seguridad

- **Liderazgo mundial para la industria europea del transporte**
  - Desarrollo de la próxima generación de medios de transporte para garantizar la cuota de mercado en el futuro
  - Sistemas inteligentes de control a bordo
  - Procesos de producción avanzados
  - Exploración de conceptos de transporte completamente nuevos

- Investigación socioeconómica y actividades de prospectiva para la formulación de políticas

Ejemplos de topics de interés…

LC-MG-1-12-2020 Cities as climate-resilient, connected **multimodal nodes** for smart and clean mobility: new approaches towards demonstrating and testing innovative solutions

LC-MG-1-13-2020 Decarbonising **long distance shipping**

LC-MG-1-14-2020 Understanding and mitigating **the effects on public health** of emerging non-regulated **nanoparticle emissions issues and noise**

MG-2-11-2020: Network and **traffic management** for future mobility

MG-2-12-2020: Improving **road safety** by effectively monitoring working patterns and overall fitness of **drivers**

MG-2-14-2020: The effects of **automation on the transport labour force**, future working conditions and skills requirements

Ejemplos de topics de interés…

MG-3-7-2020: Improved Production Processes in **Ship building**

MG-BG-03-2020: Under water noise mitigation and environmental impact

DT-ART-05-2020: Efficient and safe connected and **automated heavy commercial vehicles in real logistics operations**

DT-ART-06-2020 Large-scale, cross-border demonstration of connected and **highly automated driving functions for passenger cars**

LC-GV-08-2020 Next generation **electrified vehicles for urban and suburban use**

ENVIRONMENT...

OVERVIEW Structure for 2018-2020

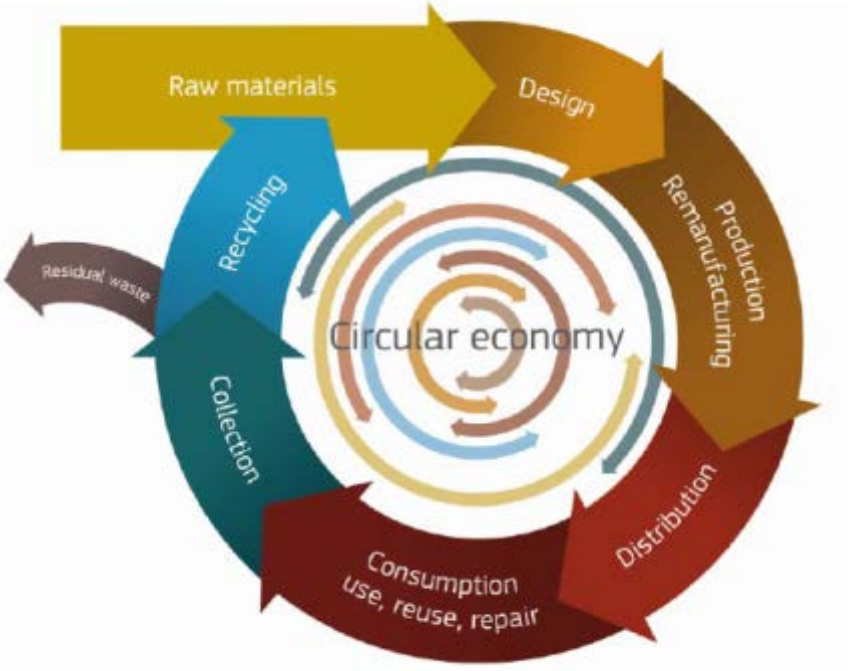
Building a low carbon, climate resilient future: Climate Action in Suport to Paris Agreement

Greening the economy in line with the Sustainable Development Goals

- Connecting economic & environmental gains – Circular Economy
- Raw Materials
- Water for our environment
- Innovating cities for sustainability resilience
- Protecting & leveraging the value of our natural & cultural assests – Earth Observation
- Nature Based Solutions
- Heritage alive

Other Actions

“Economía Circular”….¿qué significa?



A Circular Economy that implies a **fully systemic change**, and **innovation** not only in technologies, but also in organization, society, finance and policies.

Systemic Eco-Innovation:

- demonstrating the **economic** and **environmental feasibility** of the circular economy
- supporting systemic innovation to obtain a **systems-wide transformation**
- reorganising **production & consumption** to maintain or enhance the value of products, components, materials and resources throughout the value chain and the life of the products
- decoupling creation of **wealth and jobs from resource consumption**

Circular Economy….it’s the way forward

Circular Economy

http://ec.europa.eu/growth/industry/circular-economy/index_en.htm

Nature-Based solutions

Definición

- **Nature-based solutions** (green and blue infrastructure, green roofs and vertical walls, natural water retention measures, salt marshes and dunes, floodplains, etc.)
- Multi-purpose, multi-functional and multi-beneficial, **inspired and supported by nature**
- **Use the properties and functions of ecosystems** to provide ecosystem services (water regulation, flood risk protection, climate change adaptation, etc) → **"living solutions"**
- Are designed to bring **more nature and natural features and processes into cities**, landscapes and seascapes, **through systemic interventions**

Nature-Based solutions

- Se trata de **evidenciar** los **beneficios** (en todos los ámbitos) y **eficacia** de las NBS.
- Deben ser **co-diseñadas**, **co-implementadas**, **sistémicas**, basadas en **demostraciones** a gran escala y que puedan **replicarse** y **escalarse**, (*'living labs'*)
- Objetivo: Crear un **mercado para las NBS** (oferta y demanda, modelos de negocio, inversores)
- Creación de una plataforma de **todas** las partes interesadas (‘*stakeholders*’)
- Promover la cooperación internacional

City of Vitorio-Gasteiz, ES

challenge: restore degraded areas; sustainable city

solution: concentric circles of green areas; green belt of parks; green buildings; road tunnels

Co-benefits:

- entire population lives within 300m of an open green space
- better air quality
- diminished heat island effect
- increased biodiversity
- educational purpose: the community gardens

Ejemplos de topics de interés…

LC-CLA-11-2020: Innovative **nature-based solutions** for carbon neutral cities and improved **air quality**

LC-CLA-13-2020: Climate Resilience of European **coastal cities**

LC-CLA-15-2020: **Forest Fires risk reduction:** towards an integrated fire management approach in the E.U.

CE-SC5-28-2020: Develop and pilot **circular systems in plastics, textiles and furniture sectors**

SC5-27-2020: Strengthening international collaboration: Enhanced natural treatment solutions for **water security and ecological quality in cities**

SC5-32-2020: Addressing wild pollinators decline and its effects on biodiversity and ecosystem services

SECURITY...

DRAFT

Estructura Security 2020

Infrastructures

SU-INFRA01-2018-2019-**2020:** Prevention, detection, response and mitigation of combined physical and **cyber threats** to critical infrastructure in EU

Security

Fight Against Crime & Terrorism

SU-FCT02-2018-2019-**2020:** Technologies to enhance the fight against crime and terrorism → **Terrorist content on-line!**

SU-FCT03-2018-2019-**2020:** Information and data stream management to fight against **(cyber)crime** and terrorism

Disaster Management & Resilience

Border & External Security

DRAFT

Estructura Security 2020

Digital Security

SU-DS02-2020: Management of cyber-attacks and other risks

SU-DS03-2019-**2020:** Digital Security and privacy for citizens and Small and Medium Enterprises and Micro Enterprises

SU-DS04-2018-**2020:** Cybersecurity in the Electrical Power and Energy System (EPES), an armour against cyber and privacy attacks and data breaches

Artificial Intelligence for Security

Topic 1: Developing a research roadmap regarding Artificial Intelligence in support of LEAs

Topic 2: Secure and resilient Artificial Intelligence technologies, tools and solutions in support of Law Enforcement and citizen protection, cybersecurity operations and prevention and protection against adversarial Artificial Intelligence

Topic 3: Human factors, and ethical, societal and organisational aspects of using Artificial Intelligence in support of LEAS

SSH...

Estructura call-2020

EU & neighbour countries focus

Migration

Socioeconomic impact & cultural transformation in the context of the fourth industrial revolution

Governance for the future

Other actions

Ejemplos de topics de interés…

MIGRATION-05-2018-2020: Mapping and overcoming integration challenges for **migrant children**

TRANSFORMATIONS-04-2019-2020: Innovative approaches to **urban and regional development through cultural tourism**

DT-GOVERNANCE-05-2018-2019-2020: New forms of delivering public goods and inclusive public services

ICT-LEIT…

Estructura LEIT-ICT 2020

ICT

- Artifical Intelligence for EU Industry & Economy
- EU Data Infrastructure: HPC, Big Data & Cloud
- 5G
- Next Generation Internet
- Cross-Cutting & International Activities

DIGITISING & TRANSFORMING EU INDUSTRY

- Support to Digital Innovation Hubs
- Support to Plaftorms & Pilots

CYBERSECURITY

OTHER ACTIONS

https://ec.europa.eu/digital-single-market/en/news/digital-excellence-forum-ict-proposers-day-2019

ICT

EU Data Infrastructure: HPC, Big Data & Cloud

2nd International Workshop on Software Architecture Challenges in Big Data

Event date:
Monday, 9 September, 2019 to Tuesday, 10 September, 2019
Place:
Paris

Call for papers is already open. Important dates:

- Paper submission: May 31, 2019
- Notification: June 26, 2019
- Camera-ready: July 5, 2019
- Workshop: September 9-10, 2019

Organization committee

- **Zoltán Ádám Mann** (paluno – the Ruhr Institute for Software Technology, University of Duisburg-Essen, Germany).
- **Daniel Alonso Román** (Technology Institute of Valencia, Spain)
- **Michele Guerriero** (Politecnico di Milano, Italy).
- **Alessandra Bagnato** (Softeam, France)

BDV BIG DATA VALUE ASSOCIATION

2nd Big Data For Precision Medicine Symposium (BDPM 2019)

Event date:
Tuesday, 4 June, 2019
Place:
Córdoba (Spain)

The 2nd Big Data For Precision Medicine Symposium (BDPM 2019) will take place in Instituto Maimónides De Investigación Biomédica de Córdoba (IMIBIC).

The event will take place on **June 4th, 2019** as prelude to the **32th IEEE CBMS International Symposium on Computer-Based Medical Systems (CBMS 2019)**.

After the successful first edition of BDPM workshop, which took place in Athens in July 11, 2018, BDPM organizes this second edition of the event with the aim of bringing together institutions with the mutual interest of the research and innovation within the scope of Big Data and Precision Medicine.

More info at: https://medal.ctb.upm.es/bdpm2019/

IoT Week

Event date:
Monday, 17 June, 2019 to Friday, 21 June, 2019
Place:
Aarhus, Denmark

IoT Week is an annual event organized by the IoT Forum since 2011. The IoT Week conference gathers industry and academia representatives from around the world.

See more information: https://iotweek.org/

ICT

5G

5G PPP

The 5G Infrastructure Public Private Partnership

5G IA

About us | Getting Involved | Plans & Papers | Events | European 5G Activities | Media & News | Contact

The 5G Infrastructure Public-Private Partnership

7th Global 5G Event "Creating the digital Future"

June 17 @ 8:00 - June 18 @ 17:00

the 7th GLOBAL 5G EVENT

The *7th Global 5G Event "Creating the digital Future"* will take place in Valencia, Spain on June 17-18, 2019. The event is organised by 5G IA/5G PPP and the European Commission.

Come to the one event that will give you a truly global view of 5G with the key representatives from Europe, China, Japan, Korea, Brazil and the Americas. Understand the global picture of where 5G is and where it is going! Listen to the state of the art in terms of global 5G research and trials activities, see this state of the art live with 5G demonstrations from around the world.

The 7th Global 5G Event is a unique opportunity for 5G PPP projects and European organizations involved in 5G to be exposed to 5G stakeholders from outside Europe. The next G5GE event is likely not to happen in Europe before 3 or 4 years.

The 7th Global 5G Event will be co-located with *EuCNC 2019* (June 18-21, 2019).

NMBP-LEIT...

Estructura NMBP 2020

Foundations for Tomorrow's Industry

Transforming the EU Industry

Factories of the Future

Biotechnology

Medical Technology Innovation

Industrial Sustainability

Sustainable Process Industry – SPIRE PPP

Catalysing the Circular Economy

Clean Enery Through Innovative Materials

Cultural Heritage

Energy Efficient Buildings – E2B PPP

Ejemplos de topics 2020…

DT-FOF-10-2020: Pilot lines for large-part **high-precision manufacturing** (IA 50%)
DT-FOF-11-2020: Quality control in smart manufacturing
BIOTEC-06-2020: Reprogrammed microorganisms for **biological sensors**

LC-EEB-04-2020: Industrialisation of **building envelope for the renovation market**
LC-EEB-06-2018-20: ICT enabled, **sustainable and affordable residential building construction**, design to end of life

Space-LEIT...

Estructura Space 2020

Earth Observation

DT-SPACE-25-EO-2020: Big data technologies and Artificial Intelligence for Copernicus

Space business, entrepreneurship, outreach and education

Space technologies, science and exploration

Secure and safe space environment

Call - EGNSS market uptake 2019-2020

DT-SPACE-EGNSS-2-2019-**2020:** EGNSS applications fostering digitisation

Unas palabras sobre el EIC...

A partir de 2018 H2020 re-orienta parte del Pilar-II: Europea Innovation Council, EIC

EIC 2018-2020: 3000M€ para generar “impacto”

Horizon 2020 Work-Programme 2018-2020

Towards the next Framework Programme for Research and Innovation:

European Innovation Council (EIC) pilot

Important notice on the Horizon 2020 Work Programme

This Work Programme covers 2018, 2019 and 2020. The parts that relate to 2019 and 2020 are provided at this stage on an indicative basis. Such Work Programme parts will be decided during 2018 and/or 2019.

https://ec.europa.eu/easme/sites/easme-site/files/horizon_2020_work_programme_eic_pilot_2018-2020.pdf

Unas palabras sobre...
Fast Track to Innovation, FTI

FTI 2018-2020: 300M€ para ganarse un “hueco”

FTI targets relatively mature, ground-breaking new technologies, concepts, processes and business models that need final development to be able to **shape a new market** and achieve wider deployment.

Consorcios de 3 a 5 socios de EM o AC con mayoría industrial (en nº o >60% ppto)

Contribución EC <3M€

Innovation Action, (TRL 6)

Time 2 Market: 36 meses.

	2018	**2019**	**2020**
FTI	21/02 31/05 23/10	21/02 23/05 22/10	19/02 09/06 27/10

Unas palabras sobre... Inducement Prices

What are inducement prizes?

- A novel funding instrument, different from e.g. grants (the usual way to co-fund research projects).
- Prize contests address technological and/or societal challenges.
- A target is specified through award criteria.
- The reward goes to the contestant who (first/best) reaches the target.

https://ec.europa.eu/research/horizonprize/index.cfm

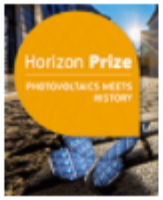
https://ec.europa.eu/research/horizonprize/index.cfm

Open Horizon Prizes

Zero power water monitoring

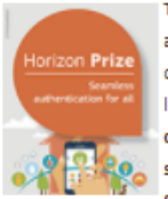
The call for submissions for the Zero Power Water Monitoring prize will run from **19 December 2017** until 11 September 2018

Photovoltaics meets history



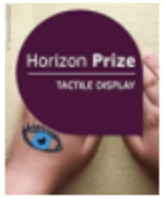
The Photovoltaics meets history prize contest has been launched with a **deadline for submissions on 26 September 2018**

Seamless authentication for all



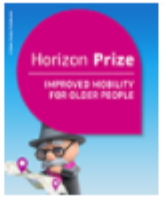
The Seamless authentication prize contest has been launched with a **deadline for submissions on 27 September 2018**

Tactile display



The call for submissions for the Tactile display prize will run from **17 April 2018** until 27 November 2018

Social Innovation



This Horizon prize for social innovation has been launched with a **deadline for submissions on 28 February 2019**

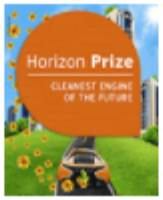
CO_2 reuse prize

The CO_2 reuse contest has been launched with **a deadline for submissions on 3 April 2019**

Low carbon hospital

The Low carbon hospital contest has been launched with a **deadline for submissions on 3 April 2019**

Cleanest engine of the future



The Cleanest engine contest has been launched with a **deadline for submissions on 20 August 2019**

Moitas grazas!

PhD Martínez-Garcia

H2020 Programme at SOST-CDTI office

marina.cdti@sost.be