

# Programa Future and Emerging Technologies (FET)



*Sevilla*

*9 de abril de 2019*

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## I. Horizonte 2020

Presupuesto: 75 mil millones € aprox



ERC	13.094,81 M€
FET	2.695,99 M€
MSCA	6.162,26 M€
Infrastructures	2.488,01 M€
<b>TOTAL</b>	<b>24.441,07 M€</b>

# FET en H2020: Objetivos

- Investigación más allá de lo que es **conocido**, aceptado o ampliamente adoptado.
- FET apoya **nuevas y visionarias** aproximaciones para desarrollar **nuevos enfoques** que abran nuevos caminos hacia **posibilidades tecnológicas radicalmente nuevas**.
- FET financia **colaboraciones interdisciplinares** fructíferas que busquen “*cross-fertilisation*” y **sinergias** entre disciplinas de vanguardia tanto científicas (ciencias de la vida, sociales, humanidades,...) como ingenierías.

Investigación de **riesgo**, que cree **nuevas ideas, conceptos y paradigmas** que supongan un **cambio radical** de las aproximaciones actuales.

**Transversalidad y** aplicación a **cualquier dominio de investigación**

FET focuses on **research beyond what is known.**

- **FET Open:** (bottom-up). **Nuevas ideas** para tecnologías radicalmente nuevas.
- **FET Proactive:** Áreas concretas. **Consolidar comunidades de investigación** y crear masa crítica.
- **FET Flagships:** Actuales y nuevas flagships.

Open, light and agile

Roadmap based research

## FET-Open

### *Early Ideas*

Individual research projects

**Exploring novel ideas**

## FET Proactive

### *Exploration and Incubation*

Topical clusters of research projects

**Developing topics & communities**

## FET Flagships

### *Large-Scale Partnering Initiatives*

Common research agendas

**Addressing grand challenges**

## II. FET OPEN (RIA&CSA)



# FET OPEN 2018-2019-2020

- **Acciones de Investigación e Innovación (RIA).** Primeras etapas de la investigación científica e innovación tecnológica en torno a **nuevas ideas para desarrollar tecnologías radicalmente nuevas.**
- **Acciones de Coordinación y Apoyo (CSA)** dirigidas a facilitar la coordinación de estas actividades y el desarrollo colaborativo.
- FET OPEN supone el **40% del presupuesto.** Gestionado por REA.

FET OPEN		
FETOPEN-01-2018-2019-2020 (RIA)	FET-Open Challenging Current Thinking	123,70M€+160,40M€+160,40M€+196,20 M€*
FETOPEN -02-2018 (CSA)	FET-Open Coordination and Support Actions	2 M€
FETOPEN-03-2018-2019-2020 (CSA)	FET Innovation Launchpad	2,5M€+2,7M€+3M€
	FET OPEN WP 2018-2019-2020 WP 2014-15: 160M€ WP 2016-2017: 259,5M€	641,20 M€*

# FETOPEN-01-2018-2019-2020 (RIA)

- Proyectos en **colaboración** (min. 3 participantes de 3 países)
- **3 M€** por proyecto
- **36/48 meses** de duración.
- Propuestas de **16 páginas** (15+1)
- **Single step submission.**
- **4 cut-off dates**

**Aspectos más repetidos en las convocatorias anteriores:**

- 5 socios por proyecto
- Socios de 4 países diferentes
- Duración de 36 meses

Tipo de acción	Presupuesto			Deadlines
	2018	2019	2020	
FETOPEN-01-2018-2019-2020 (RIA)	<b>123,70 M€</b>	160,40 M€ 160,40 M€	196,20 M€*	<b>15 mayo 2018</b> 24 enero 2019 27 septiembre 2019 13 mayo 2020

**\* Piloto del EIC a petición del Consejo Europeo Julio 2018  
Presupuesto aun por aprobar en WP FET 2020 – Junio 2019**

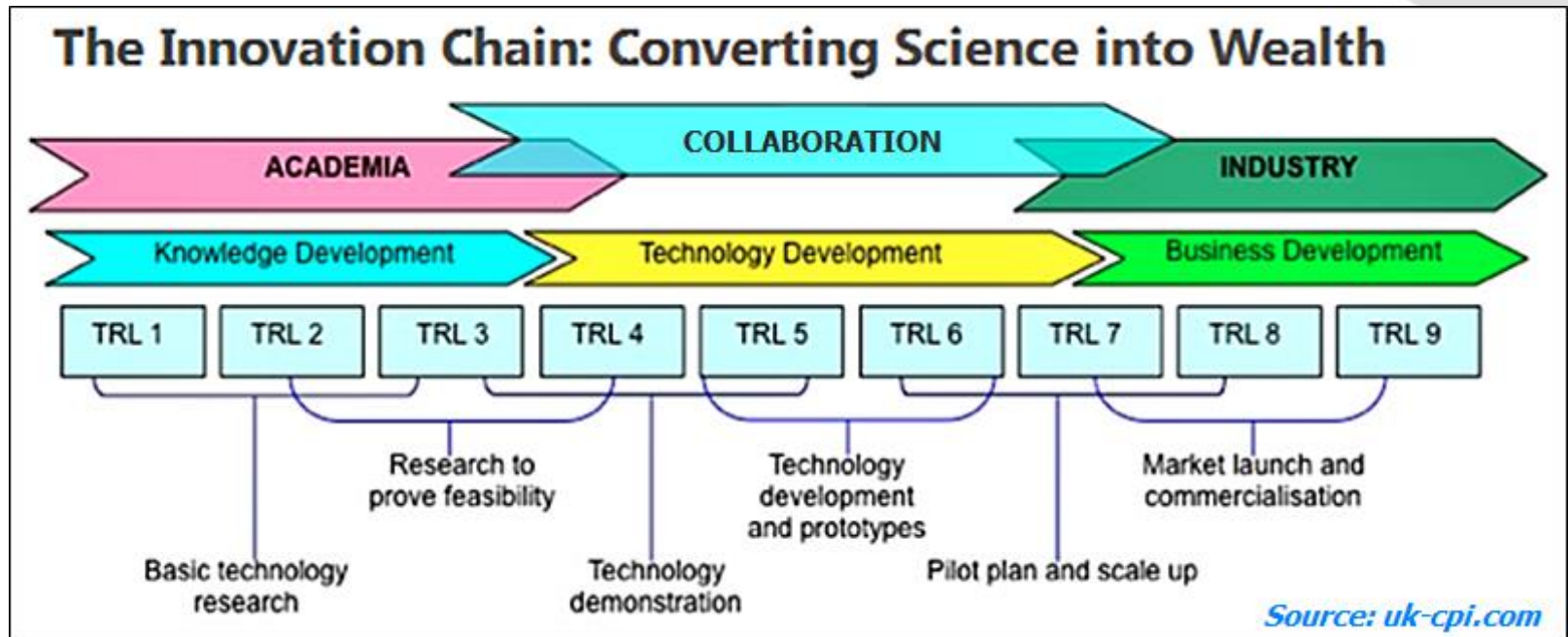


# FET OPEN 2018-2019-2020 (RIA)

II. FET OPEN (RIA)

## Acciones de investigación e innovación (RIA – 100% financiado):

- Proyectos I+D en cualquier área o línea de investigación. No solo ICT.
- Proyectos “bottom up” pero no “blue sky research” (No ERC) Orientado a la tecnología
- **TRL 1 -3.** Resultados proyecto FET **prueba experimental** de un concepto en laboratorio.



# ¿Cómo identificar una idea FETOPEN?

- Comprobar que **la idea no tiene sitio en otros WPs en H2020** (LEIT & Societal Challenges) y otras calls de FET que pueden ser de interés (Proactive/Flagships)
- El/la investigador/a es el/la que conoce el **Estado del Arte** y lo que realmente supone una **idea rompedora** con respecto a su tema de investigación que suponga un impacto clave.
- Una buena idea FETOPEN debe identificar los primeros pasos para desarrollar una tecnología futura pero **no para mejorar lo que ya existe!**
- Esos primeros pasos de una futura tecnología además deben tener un componente **disruptivo**, es decir, de hacerse una realidad **debería desplazar la tecnología actualmente existente.**



# FET Gatekeepers

Timo Hallantie's blog – Head of Unit FETOPEN: [What it takes to succeed in FET OPEN](#)

Vídeo FET Gatekeepers: <https://www.youtube.com/watch?v=t8dAJvoiguM>

**Scope:** Propuestas de investigación **interdisciplinar de vanguardia de alto riesgo/alto impacto** con todas las siguientes características esenciales o "FET gatekeepers":

- **Visión radical:** el proyecto debe abordar una **nueva tecnología** que desafíe los paradigmas actuales.
- **Breakthrough tecnológico:** El proyecto debe ser **científico-tecnológico novedoso y ambicioso** para su visión.
- **Investigación interdisciplinar ambiciosa:** Para lograr **abrir nuevas áreas de investigación**.

**NO AVANCE EN TECNOLOGÍA YA ESTABLECIDA**

**NO INVESTIGACIÓN EXPLORATORIA SIN OBJETIVO TECNOLÓGICO**

**NO INVESTIGACIÓN INCREMENTAL DE BAJO RIESGO**

# CRITERIOS DE EVALUACIÓN

Compliance with FET Gatekeepers!!

Contribution to impacts listed in the WP!!

Excellence	Impact	Implementation
<p>Clarity of the <b>radical vision</b> of science-enabled technology and its differentiation from current paradigms.</p> <p><b>Novelty</b> and ambition of the proposed science-to-technology <b>breakthrough</b> that addresses this vision.</p> <p>Range of and added value from <b>interdisciplinary</b> for opening up <b>new areas of research; non-incrementality</b> of the research proposed.</p> <p><b>High-risk, plausibility</b> and <b>flexibility</b> of the research approach.</p>	<p>The extent to which the outputs of the project would contribute to the <b>expected impact listed</b> in the Work Programme under this topic.</p> <p>Effectiveness of <b>measures and plans to disseminate</b> and use the results (including <b>management of IPR</b>) and to <b>communicate</b> about the project to different target audiences.</p>	<p><b>Coherence</b> and <b>effectiveness</b> of the <b>research methodology</b> and <b>work plan</b> to achieve project objectives and impacts, including <b>adequate allocation of resources</b> to tasks and partners.</p> <p><b>Role and complementarity</b> of the participants and extent to which the consortium as a whole brings together the <b>necessary expertise</b>.</p>
<p>Threshold: 4/5 P. 60%</p>	<p>Threshold: 3.5/5 : 20%</p>	<p>3/5 P: 20%</p>

## Estructura propuesta

Part A: Administrative part of the proposal

Part B : Scientific part of the proposal

**NO COVER**

Section 1: S&T Excellence

Section 2: Impact

Section 3: Implementation

Additional information

Section 4: Members of the consortium

E.g. legal entity, CV, subcontract, third party

Section 5: Ethics and Security

Ethics self-assessment & supporting documents

Security checklist

*Section 1,2 & 3 are strictly limited to 15 pages!*

*Section 4 & 5 are not covered by the page limit.*

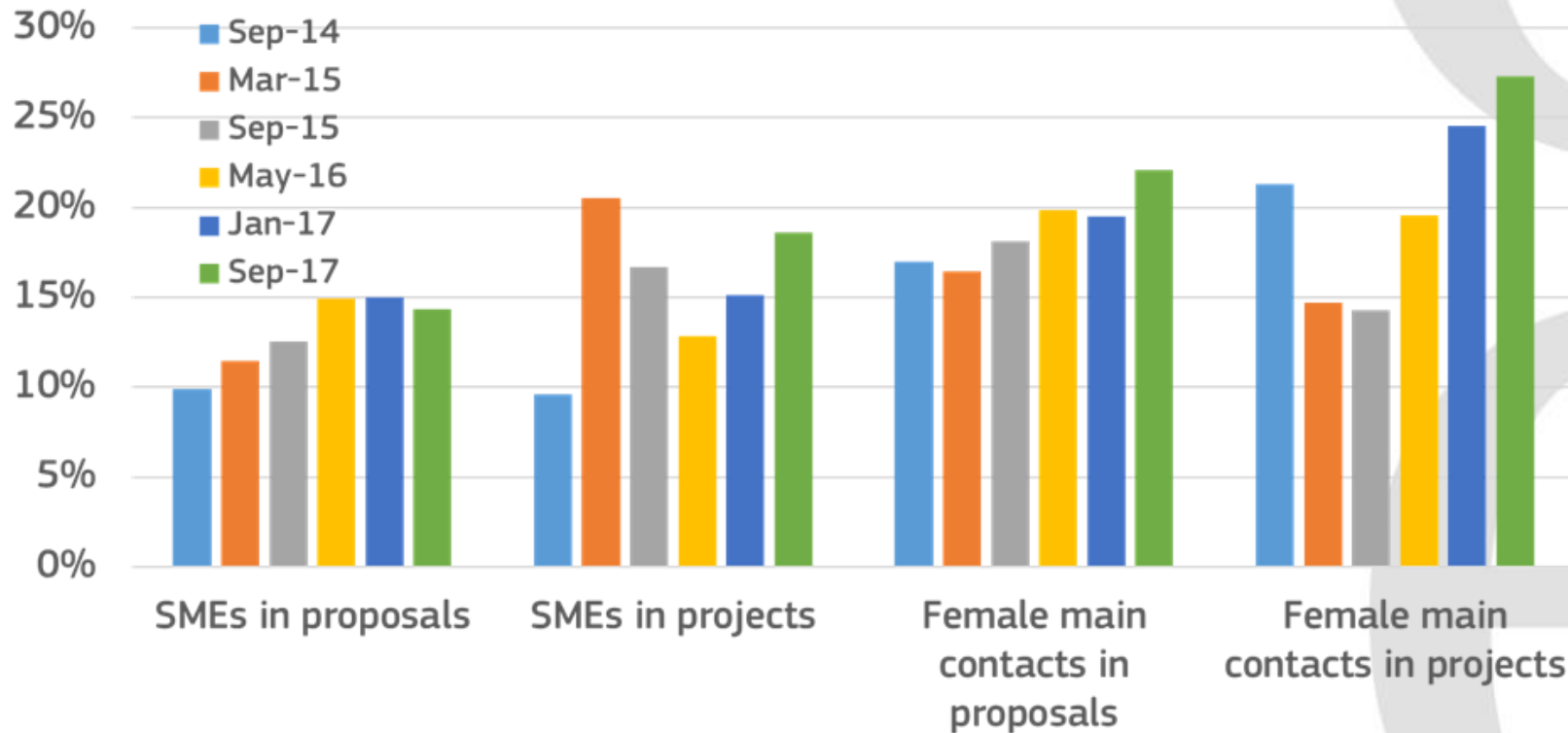
## Algunos aspectos a tener en cuenta a la hora de preparar una propuesta en FETOPEN

- Importancia de incluir “**nuevos actores**”: SME, mujeres y jóvenes investigadores. En coordinación con parte 4.
- Importancia **criterios de desempate H2020**.
- Importancia de **los CVs** en la propuesta.
- Confección del **consorcio**:
  - ¿Incluir socio de **tercer país**, p.e USA? Participación de entidades de terceros países.
    - Financiado por UE.
    - No financiado pero proyecto sigue.
    - Socio con financiación propia.
    - Posible solución: **Inclusión de un “Advisory Board”**.
  - **Incluir empresa, PYME, socio industrial.**

# FET OPEN 2018-2019-2020 (RIA)

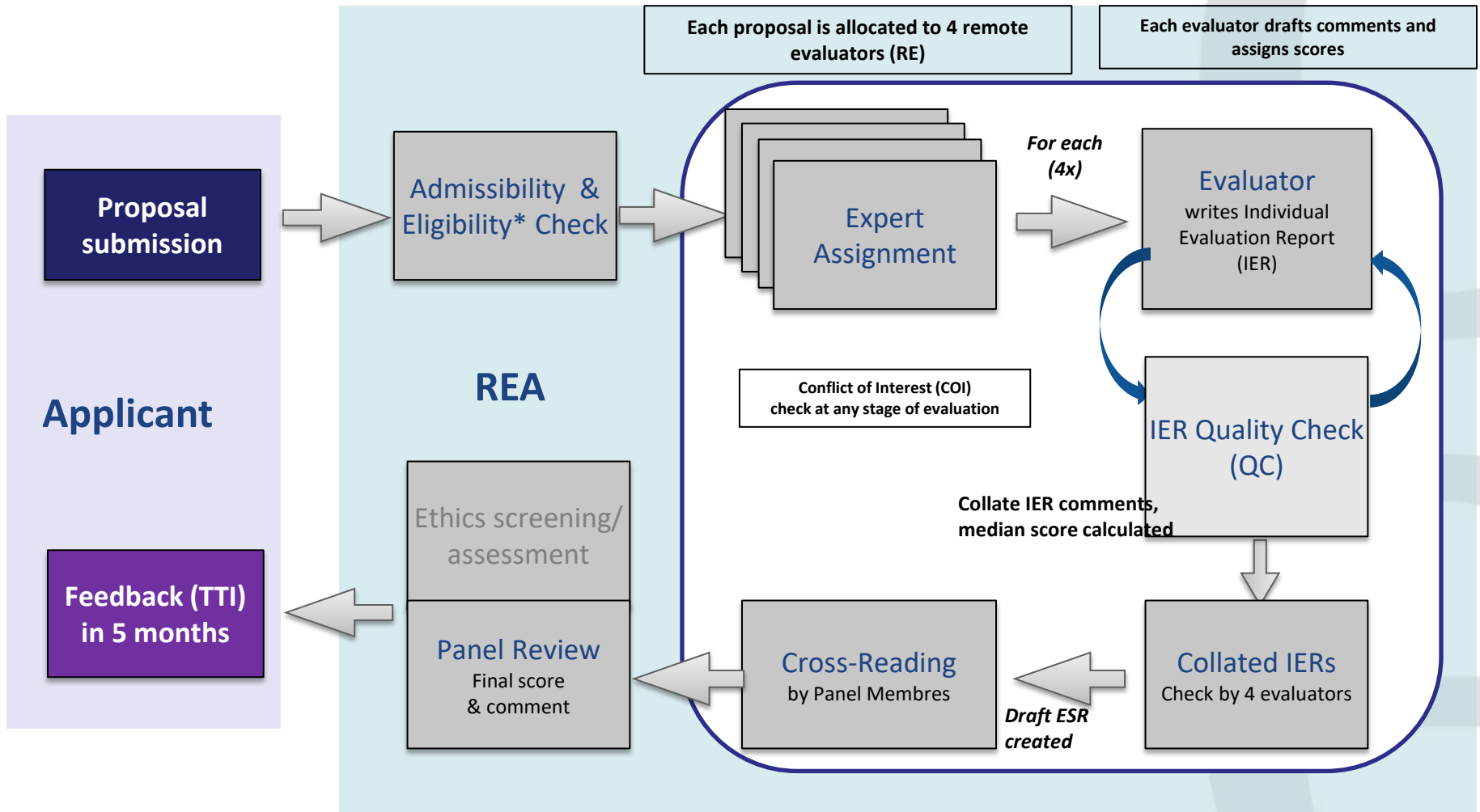
II. FET OPEN (RIA)

## SMEs and female main contacts in FET-Open RIA 2014-2017



**El 70% de los proyectos financiados tienen al menos una PYME, el 80% un socio industrial.**

# PROCESO DE EVALUACIÓN



\*out of scope can be declared at further stages



# FET-Open evaluation outcome (WP2014-18 cut-offs)

Calls	Total # of eligible proposals	% proposals above threshold	Number of grants	Success rate	Total Budget (M€)
Sep-14	639	39%	24	3,8%	78,1
Mar-15	665	49%	11	1,7%	41
Sep-15	800	43%	11	1,4%	37,8
May-16	544	50%	23	4,2%	87,8
Jan-17	365	52%	26	7,1%	84,8
Sep-17	395	43%	27	6,8%	85,3
May-18	356	45%	38	10,7%	124
Jan-19	421	?	(50?)	11-12%	160
<b>Total</b>	<b>4185</b>		<b>200 (aprox)</b>		<b>700</b>

# Ejemplos de proyectos FETOPEN

Enlace a todos los proyectos FETOPEN RIA financiados hasta ahora (y también los del Innovation Launchpad):

<http://ec.europa.eu/programmes/horizon2020/en/h2020-section/fet-open>

## WP 2014-2015:

- 1º Corte: 24 proyectos
- 2º Corte: 11 proyectos
- 3º Corte: 11 proyectos

## WP 2016-2017:

- 1º Corte: 22 proyectos
- 2º Corte: 26 proyectos
- 3º Corte: 27 proyectos

## WP 2016-2017 Innovation Launchpad:

- 1º Corte: 16 proyectos
- 2º Corte: 19 proyectos

## FET-Open Research and Innovation Actions

- **B2B aims** to generate a first-of-a-kind 3D model of spontaneous breast cancer metastasis to the bone to dissect the complexity of the metastatic process and empower high-throughput drug screening in a physiological context. This technology will transcend the limitations of current in vitro technologies, enabling physiological tissue-level complexity with organoids comprising several million cells. Coordinator: Consiglio Nazionale Delle Ricerche, Italy
- **BionicVEST** will develop the first system to electrically reproduce linear accelerations in the otolith organ by stimulating their neural ends. It will demonstrate the safety of a vestibular implant for humans and determine its efficacy in restoring vestibular function. Coordinator: Fundacion Canaria De Investigacionsanitaria (FUNCANIS), Spain
- **BioWings** proposes to solve the deadlock associated with the slow progress in the development of biocompatible actuator materials through the implementation of a completely new class of smart actuating materials to be integrated in biocompatible Micro-Electro-Mechanical Systems (MEMS) – the key components of biomedical systems, enabling miniaturised devices with diagnostic, prognostic and therapeutic functionalities. Coordinator: Danmarks Tekniske Universitet, Denmark
- **CHIRON** envisions spin wave computing to complement and eventually replace CMOS in future microelectronics, in response to the future miniaturisation of electronic circuits following Moore's law that will require the introduction of increasingly disruptive technologies to limit power consumption and optimise performance per circuit area. Coordinator: Interuniversitair Micro-Electronica Centrum, Belgium
- **CyGenTiG** aims to build and demonstrate a technology for controlling the development of engineered tissues by optogenetics and closed-loop, self-correcting control. The core

# Algunos Ejemplos de proyectos FETOPEN (RIA)

**2D-INK** is targeted at developing inks of novel 2D semiconducting materials for low-cost large-area fabrication processes on insulating substrates through a new methodology, which will exceed the properties of state-of-the-art graphene- and graphene oxide based inks. Achieving this would represent an important step forward in the processing of 2D semiconducting materials and will provide the key parameters for fabricating the next generation of ultrathin electronic appliances.

**IBSEN** will build a repertoire of human behaviour in large (1000+ persons) structured groups using controlled experiments. The project will apply this setup to specific research questions, focusing on novel phenomenology that may arise in large systems as compared to typical smaller ones, to find the rules that govern human behaviour in those cases, including the influence of social context and individual identity on them

**CellViewer** seeks to visualize in single cells with nanoscale resolution macromolecules such as proteins and genetic information carriers (DNA, mRNA) in parallel and at the systems level. This will permit to study the mechanisms of self-renewal and differentiation of mouse embryonic stem cells and consequently to predict stem cell changes resulting from specific input stimuli.

# Algunos Ejemplos de proyectos FETOPEN (RIA)

**AMADEUS** will investigate next generation materials and solid state devices for ultra-high temperature energy storage and conversion. Coordinator: Universidad Politécnica de Madrid, Spain.

**ByAxon** focusses on the development of an active bypass that will enable neural reconnection directly at the spinal cord level. Coordinator: *Fundación IMDEA* Nanociencia, Spain.

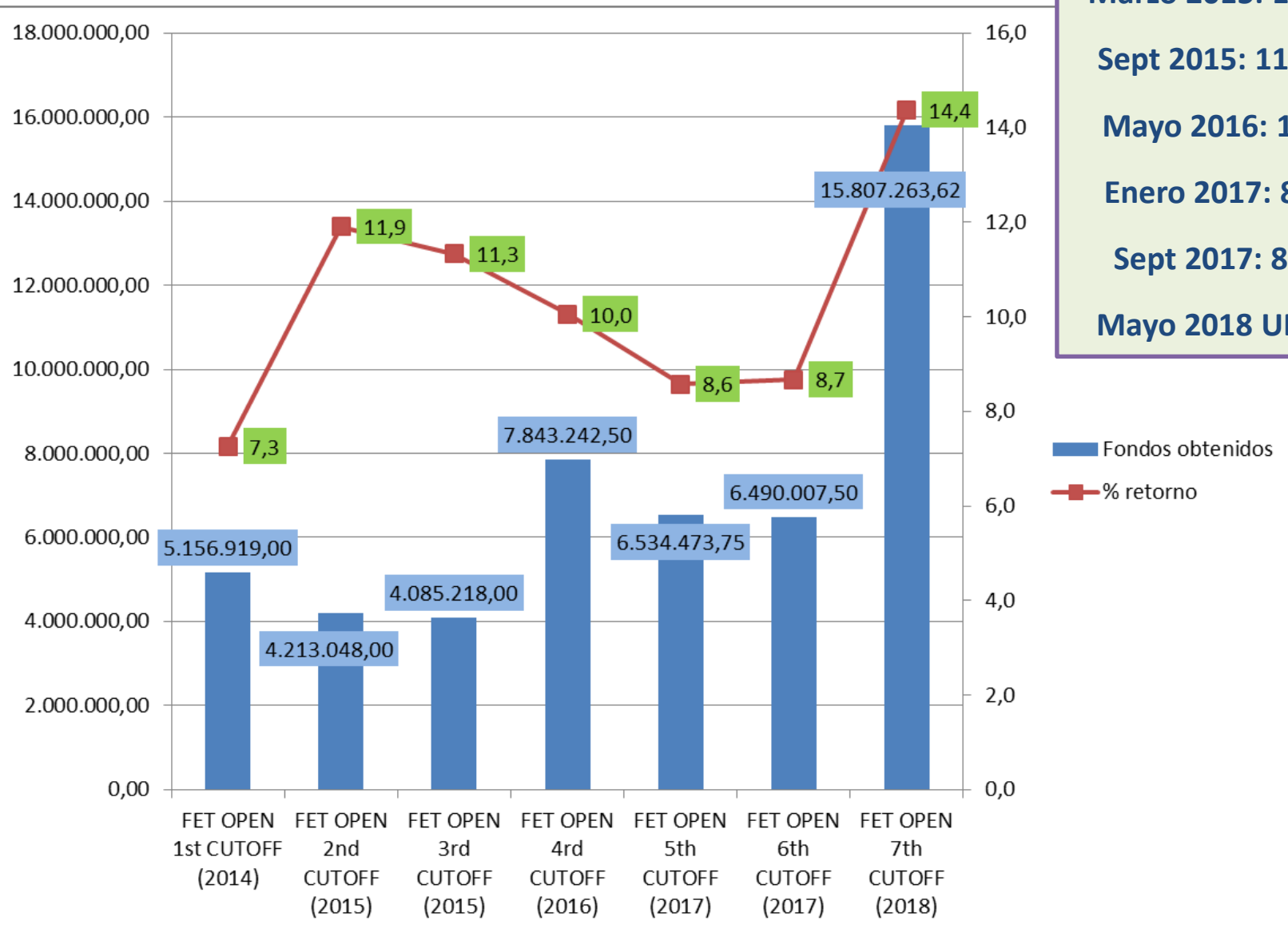
**HISTO-MRI** aims at non-invasive visualization of individual human cells in vivo and in real time through high frequency pulsed magnetic resonance imaging. Coordinator: Agencia Estatal Consejo Superior de Investigaciones Científicas, Spain.

**SALBAGE** is planning to create a new Sulfur-Aluminium battery having a high energy density and low price compared with the actual Li-ion technology by putting in the synthesis of solid-like electrolytes based on polymerizable ionic liquids and Deep Eutectic Solvents in order to obtain polymer-gel electrolytes with a high ionic conductivity at room temperature. Coordinator: Albufera Energy Storage Sl, Spain.

# FET OPEN RIA 2014-2018

## Participación entidades españolas

**Sept 2014: 7,3 % UE28 – 4º**  
**Marzo 2015: 11,9% UE28 – 3º**  
**Sept 2015: 11,3% UE 28 – 3º**  
**Mayo 2016: 10% UE 28 – 4º**  
**Enero 2017: 8,6% UE28 - 5º**  
**Sept 2017: 8,7% UE28- 6ª**  
**Mayo 2018 UE28: 14,4% - 3º**



■ Fondos obtenidos  
 ■ % retorno

- **Reto específico: Incrementar el potencial innovador de FET** financiando actividades no previstas en los GA que permitan facilitar aplicaciones comerciales de los resultados de los proyectos.
- Para los **proyectos FET del 7PM/H2020** recientemente finalizados o a punto de terminar.
- Para financiar **modelos de negocio, definición planes de comercialización, consolidación de una estrategia IPR, desarrollo contactos que faciliten llegada a mercado** (inversores, socios industriales, end users,...) **Complementario** a otros instrumentos para desarrollo de negocios y SMEs
- Proyectos de **máximo 18 meses**, máximo **0,1 M€**. Propuestas de 7 páginas.

**FET Innovation Launchpad is designed to assist in the first steps to accelerate the real-world impact of a result from FET research**

## FETOPEN-03-2018-2019-2020 (CSA) INNOVATION LAUNCHPAD

Tipo de acción	Presupuesto			Deadlines
	2018	2019	2020	
FETOPEN-03-2018-2020 (CSA) (opening 7 Nov 2017)	<b>2,5 M€</b>	<b>2,70 M€</b>	<b>3,00 M€</b>	<b>16 Oct 2018</b> <b>8 Oct 2019</b> <b>14 Oct 2020</b>

Webinar Innovation launchpad convocatoria de 12/05/2017:

<https://webcast.ec.europa.eu/fet-innovation-launchpad-cut-off-27-09-2017>

Enlace a la convocatoria de octubre 2019: <https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/fetopen-03-2018-2019-2020>

## FET-Open INNOVATION LAUNCHPAD evaluation outcome

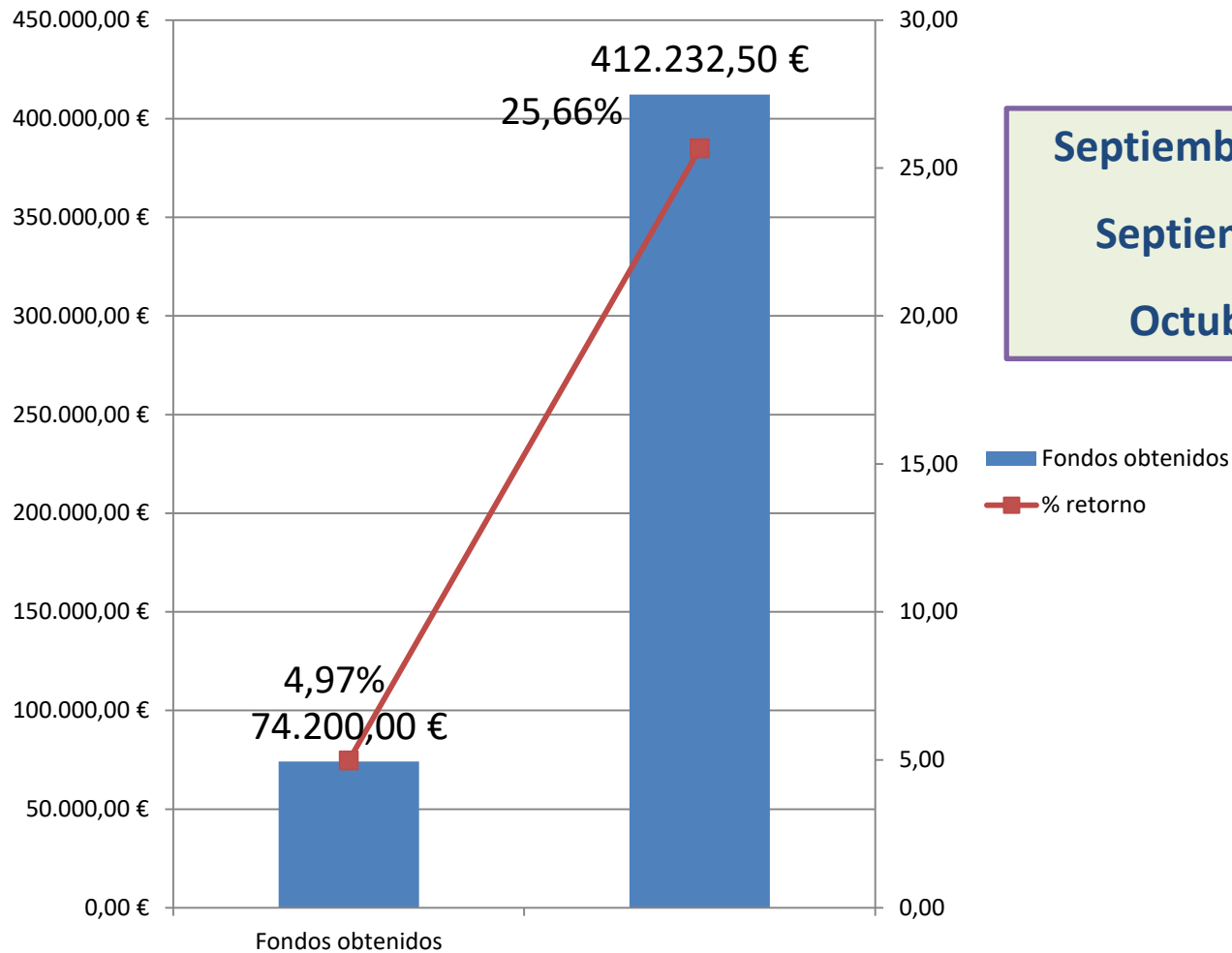
Convocatorias	2016	2017	2018	2019	2020
Presupuesto	1,2M€	1,8M€	2,5M€	2,7M€	3,0M€

Call Topic	Propuestas elegibles	Financiadas	Tasa éxito	Nota de corte
FETOPEN Innovation Launchpad (26 septiembre 2016)	88	16	18,2%	4,3
FETOPEN Innovation Launchpad (27 septiembre 2017)	54	18	33,3%	4,15
FETOPEN Innovation Launchpad (16 octubre 2018)	38	25	66%	3,45



# FET OPEN CSA Innovation Launchpad

## Resultados entidades españolas



**Septiembre 2016: 5% UE28 – 10º**

**Septiembre 2017: 25,6% - 1º**

**Octubre 2018: 12,8% - 4º**

### III. FET PROACTIVE

- Boosting Emerging Technologies (BET)
- High Performance Computing (HPC)

Nuevos topics en WP 2020

# FET PROACTIVE: BOOSTING EMERGING TECHNOLOGIES&HPC

Proyectos con resultados concretos para:

- Madurar **nuevas áreas estructurando comunidades emergentes** y apoyando el diseño y desarrollo de temas científicos transformadores y **nuevas comunidades de investigación interdisciplinaria**.
- Establecer cimientos e **impulsar ecosistemas innovadores** en nuevas tecnologías emergentes
- Propuestas: 30+1 páginas.
- **Proyectos entre 4-7 M€**, duración de hasta **5 años**. 3 a 8 socios por proyecto.
- Un solo *deadline, one step submission*.

# Call FET Proactive – Draft EIC WP

Deadline: 3 Sep 2019!!

## FETPROACT-EIC-PATHFINDER-05-2019: FET Proactive: emerging paradigms and communities

- a. Human-Centric AI
- b. Implantable autonomous devices and materials
- c. Breakthrough zero-emissions energy generation for full decarbonization

52.00 M€

## FETPROACT-EIC-PATHFINDER-06-2019: EIC Transition to Innovation Activities

The targeted technology should be in one of the following areas:

- Micro- and Nano-technologies
- Artificial Intelligence and advanced robotics
- Technologies for the life sciences, health and treatment
- Energy technologies
- Interaction technologies (including virtual- augmented- and mixed reality,...)

16.00 M€

# Call FET Proactive – Draft FET WP 2020

EUROPEAN INNOVATION COUNCIL **Deadline: 3 Sep 2019**

**FETProact-EIC-05-2019** budget: 52M€

## **Emerging paradigms and communities**

- To explore and consolidate a new technological direction in order to put it firmly on the map as a viable **paradigm for future technology**.
- Stimulate the emergence of a European innovation ecosystem around a **new technological paradigm**
- **Scope is one of the following subtopics:**
  - Human-Centric AI
  - Implantable autonomous devices and materials
  - Breakthrough zero-emissions energy generation for full decarbonisation
- Up to **€4-5 million and up to 4 years**
- Minimum **3 partners** from 3 EU / AC

# Call FET Proactive – Draft FET WP 2020

EUROPEAN INNOVATION COUNCIL

**Deadline: 3 Sep 2019**

## Conditions Transition to Innovation

- Total budget: **16M€**
- Small RIA up to 24 months
- EU contribution: 1-2M€
- Explicit links with H2020 FET OPEN and PROACT project(s)
- No duplications with activities of the original project(s)!
- Well-defined intended outcome, KPIs
- Strong exploitation plan with market potential
- Agreement on project(s) IPRs in proposal

FETPROACT-EIC-06-2019: EIC Transition to Innovation Activities



European  
Commission

# Call FET Proactive – Draft FET WP 2020

**FETPROACT-05-20** Fecha apertura: 19 noviembre 2019 communities:  
RIA on 3 sub-topics Fecha de cierre: 2 de abril 2020

- Future technologies for social experience
- Measuring the unmeasurable — Sub-nanoscale science for Nanometrology
- Digital twins for the life-sciences

## **FETPROACT-06-2020: Environmental Intelligence**

- New techniques for creating and using dynamic models of environmental evolution
- Radically novel approaches to resilient, reliable and environmentally responsible in-situ monitoring

## **FETPROACT-07-2020: Neuromorphic computing technologies**

- New low-power neuromorphic hardware
- New theories, architectures and algorithms
- Demonstrate advantages in end-to-end scenarios

50.00 M€

18.00 M€

15.00 M€

## IV. FET FLAGSHIPS

Graphene&HBP

Quantum Technologies

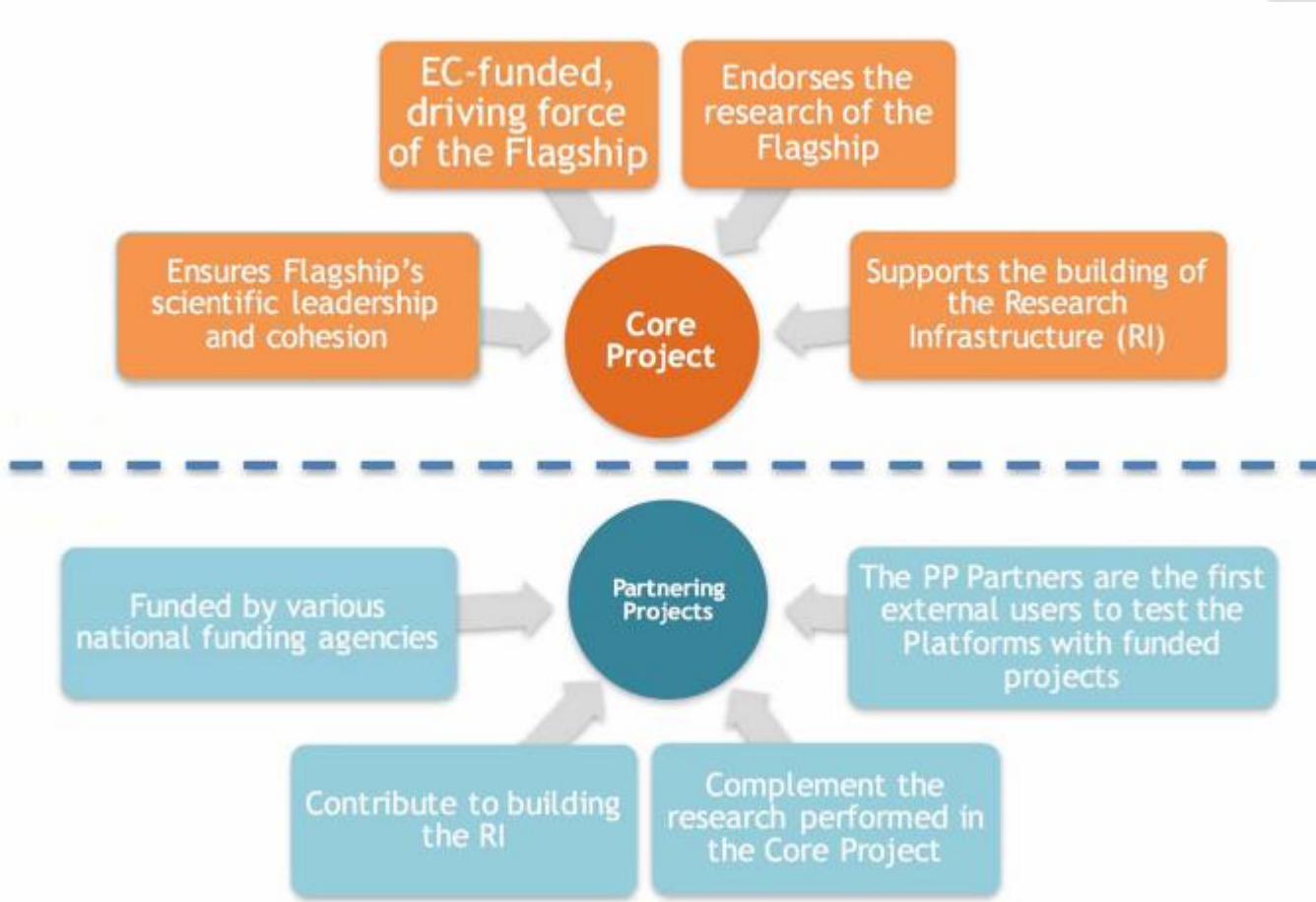
“Large scale research initiative” on Batteries

Future FET Flagships

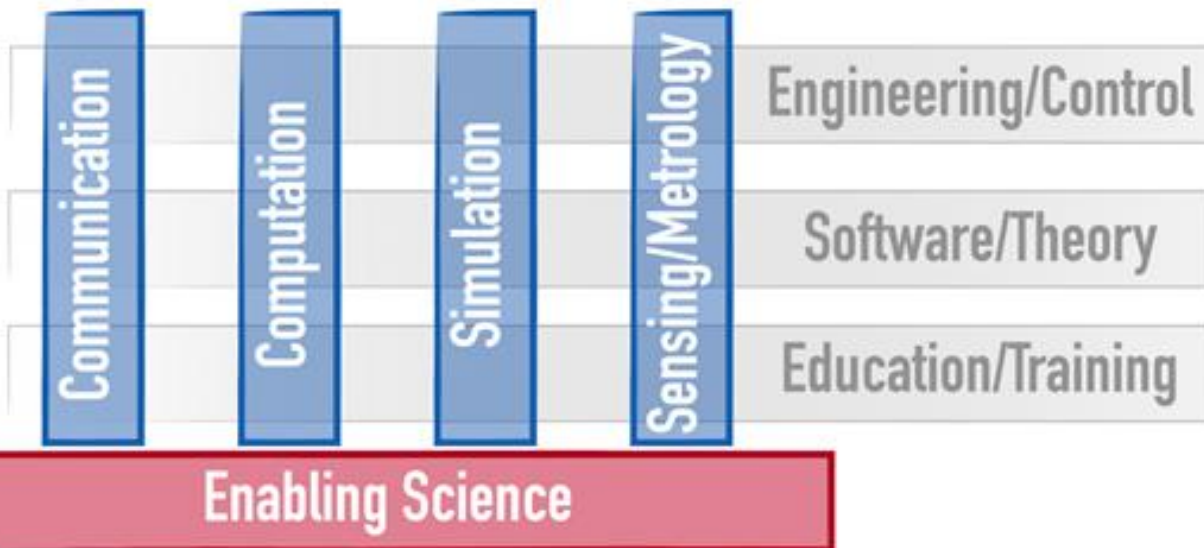
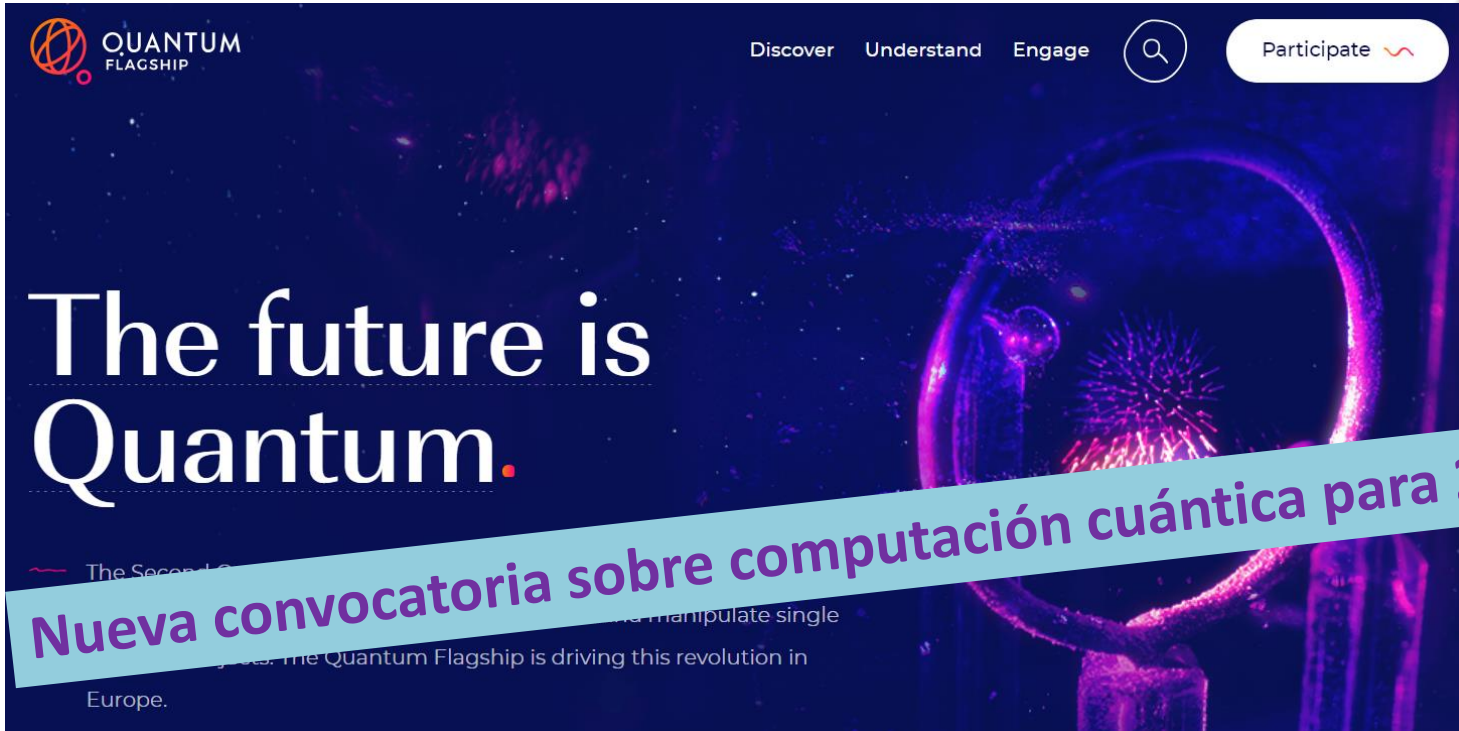
Horizon Europe: Flagships/Missions?





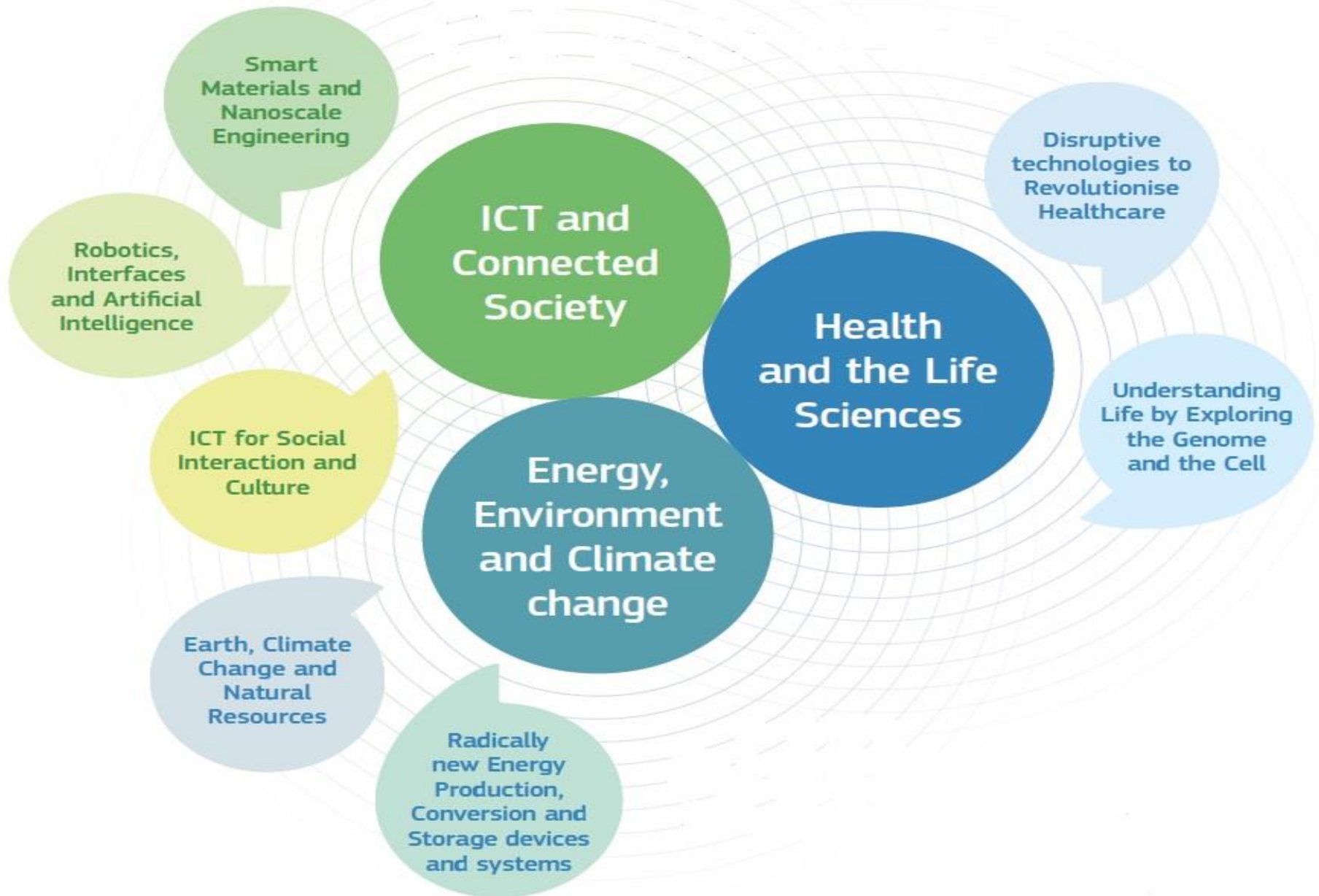


# Flagship en Quantum Technologies



<https://qt.eu/>

# New flagships selection process (2016-2018)



# Selected FET Flagships CSAs Pilot proposals



Time  
Machine  
FET  
Flagship

- Time Machine will give Europe the technology to strengthen **its identity against globalisation, populism and increased social exclusion**, by turning its history and cultural heritage into a living resource for co-creating its future.
- **Large-scale digitisation and computing infrastructure** mapping millennia of European historical and geographical evolution...
- A series of fundamental breakthroughs are targeted in **Artificial Intelligence and ICT**, making Europe the leader in the extraction and analysis of **Big Data** of the Past.
- Time Machine will drive **Social Sciences and Humanities** toward larger problems, allowing new interpretative models to be built on a superior scale.

- The Humane AI Flagship will develop the **scientific foundations and technological breakthroughs** needed to shape the **ongoing AI revolution**.
- Need for fundamentally new solutions to core research problems in AI, e.g. understanding actions recommended or performed by AI systems.
- Challenges include: learning complex world models; explainable systems; adapting to dynamic, open-ended real-world environments; in-depth understanding of humans and complex social contexts...
- The focus is on **human-centered AI**, with a strong emphasis on **ethics**, values by design, and related **legal and social issues**.

HUMANE  AI



# Selected FET Flagships CSAs Pilot proposals



- The grand challenge of LifeTime is to understand how genomes function within cells, and how cells form tissues and dynamically remodel their activities when tissues progress towards disease
- Early detection and interception of chronic and progressive diseases
- LifeTime aims to revolutionize healthcare by developing and integrating several emerging, disruptive technologies.
- Its long-term vision is that LifeTime technologies will inform the physician about the molecular history of a patient's tissues, their future, and the consequences of perturbations or medical treatments

- Recently, a new class of “living drugs” has been developed - Advanced Therapies which aim to transform the current focus of “treatment of disease” into one that concentrates on “restoration of health” with promising results in a broad field of Regenerative Medicine, including targeted immune reconstitution for cancer treatment.
- If Europe wants a leading role in this emerging field in the future, a mission-driven approach is required to make the transforming promise of Advanced Therapies a reality.

REEROT2

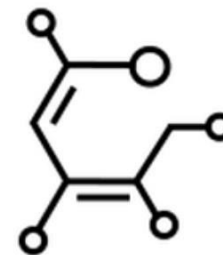
# Selected FET Flagships CSAs Pilot proposals



- Energy-X will develop the science as well as technology enabling a **sustainable production of synthetic fuels for energy storage** and as feedstock for the chemical and materials industry.
- Provide a platform for future chemical energy conversion technology in Europe.
- disruptive new science and technology enabling efficient conversion of solar and wind energy into chemical form and will combine this ambition with scale-up to industrially relevant conditions by integrating with European industry.
- Two demonstration projects: manufacturing of carbon-neutral aviation fuels and decentralized production of fertilizers with no CO2 footprint.

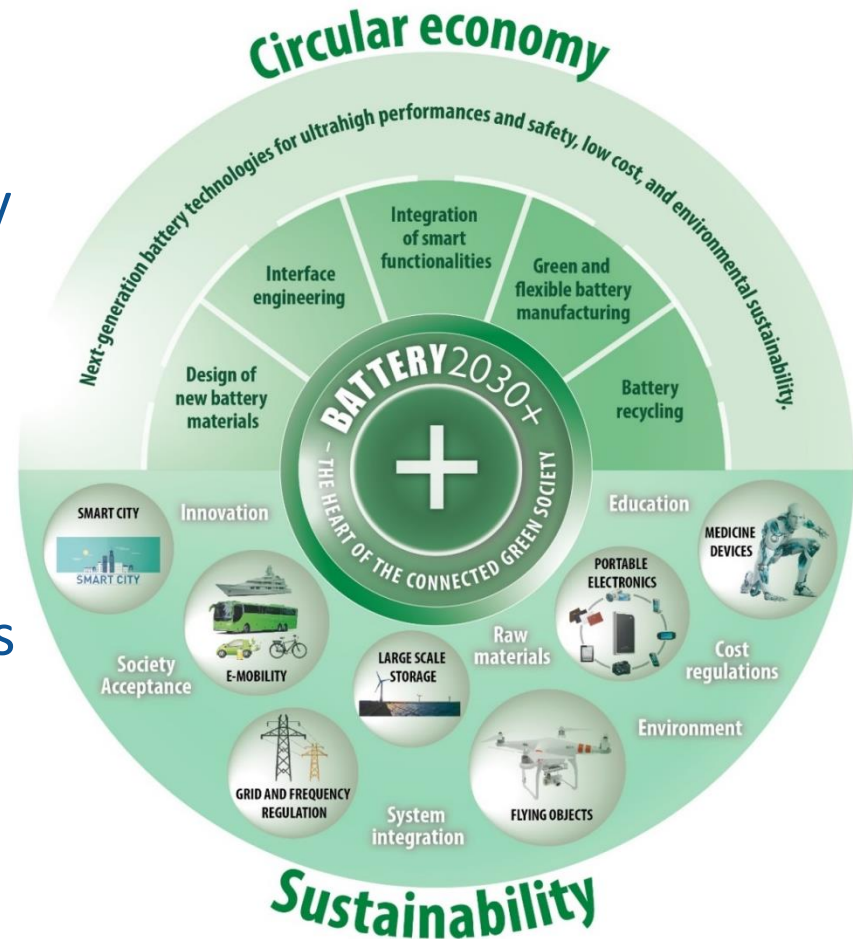
- The aim of SUNRISE is to make sustainable fuels and commodity chemicals at affordable costs of materials and Earth surface, using **sunlight as the only energy source**.
- Scientific and industrial communities that will develop radically new technologies to harvest solar energy and enable **the foundation of a global circular economy**.
- SUNRISE targets three synergistic S&T approaches: (i) electrochemical conversion with renewable power, direct conversion via (ii) photoelectrochemical and (iii) biological and biohybrid systems.

SUNRISE



# A large-scale research initiative on Future Battery Technologies

- ❖ Ultrahigh performance, smart & sustainable battery
- ❖ e-mobility and stationary storage (and others)
- ❖ Disruptive approaches & battery technologies
- ❖ Integrative approach across the value chain
- ❖ Digitally empowered



# Battery “large scale research initiative topics”

- **LC-BAT-12-2020: Novel methodologies for autonomous discovery of advanced battery chemistries:** The development of a full-scale autonomous battery **Material Acceleration Platform (MAP)** linking artificial intelligence (AI) and multi-scale modelling to radically accelerate battery material synthesis and characterization. **20M€**

**Traspaso a cross-cutting Call 'Building a low-carbon, climate resilient future: Next-Generation Batteries' in the part “Cross-cutting activities” of the Horizon 2020 Work Programme 2018-2020**

- **LC-BAT-14-2020: Self-healing functionalities for long lasting battery cell chemistries** Self-healing functionalities for long lasting battery cell chemistries. **10M€**
- **LC-BAT-15-2020: Coordinate and support the large scale research initiative on Future Battery Technologies (CSA).** **2M€**
- **CE-NMBP-41-2020: ERA-NET on materials, supporting the circular economy and Sustainable Development Goals.** **5M€ (M-ERANET)**

**Topics: OPEN**

**9 julio 2019**

**DEADLINE**

**16 jan 2020**

**ERANET: OPEN**

**27 junio 2019**

**DEADLINE**

**13 feb 2020**



# V. El futuro de FET en el programa Horizon Europe



# FET en Horizon2020



## FET-Open

### *Early Ideas*

Individual research projects

**Exploring novel ideas**

## FET Proactive

### *Exploration and Incubation*

Topical clusters of research projects

**Developing topics & communities**

## FET Flagships

### *Large-Scale Partnering Initiatives*

Common research agendas

**Addressing grand challenges**

# FET en Horizon EUROPE

**“I want an evolution not a revolution”  
Carlos Moedas, 2/5/2018**

## FET-Open

*Early Ideas*  
Individual research projects

Exploring novel ideas

## FET Proactive

*Exploration and Incubation*  
Topical clusters of research projects

Developing topics & communities

## FET Flagships

*Large-Scale Partnering Initiatives*  
Common research agendas

Addressing grand challenges

### Pillar I: Open Science

European Research Council (ERC)

Marie Skłodowska-Curie Actions

Research Infrastructures

### Pillar II: Global Challenges and Industrial Competitiveness

Health

Inclusive and Secure Societies

Digital and Industry

Climate, Energy and Mobility

Food and Natural Resources

Joint Research Centre

### Pillar III: Open Innovation

European Innovation Council

Innovation ecosystems

European Institute of Innovation & Technology (EIT)

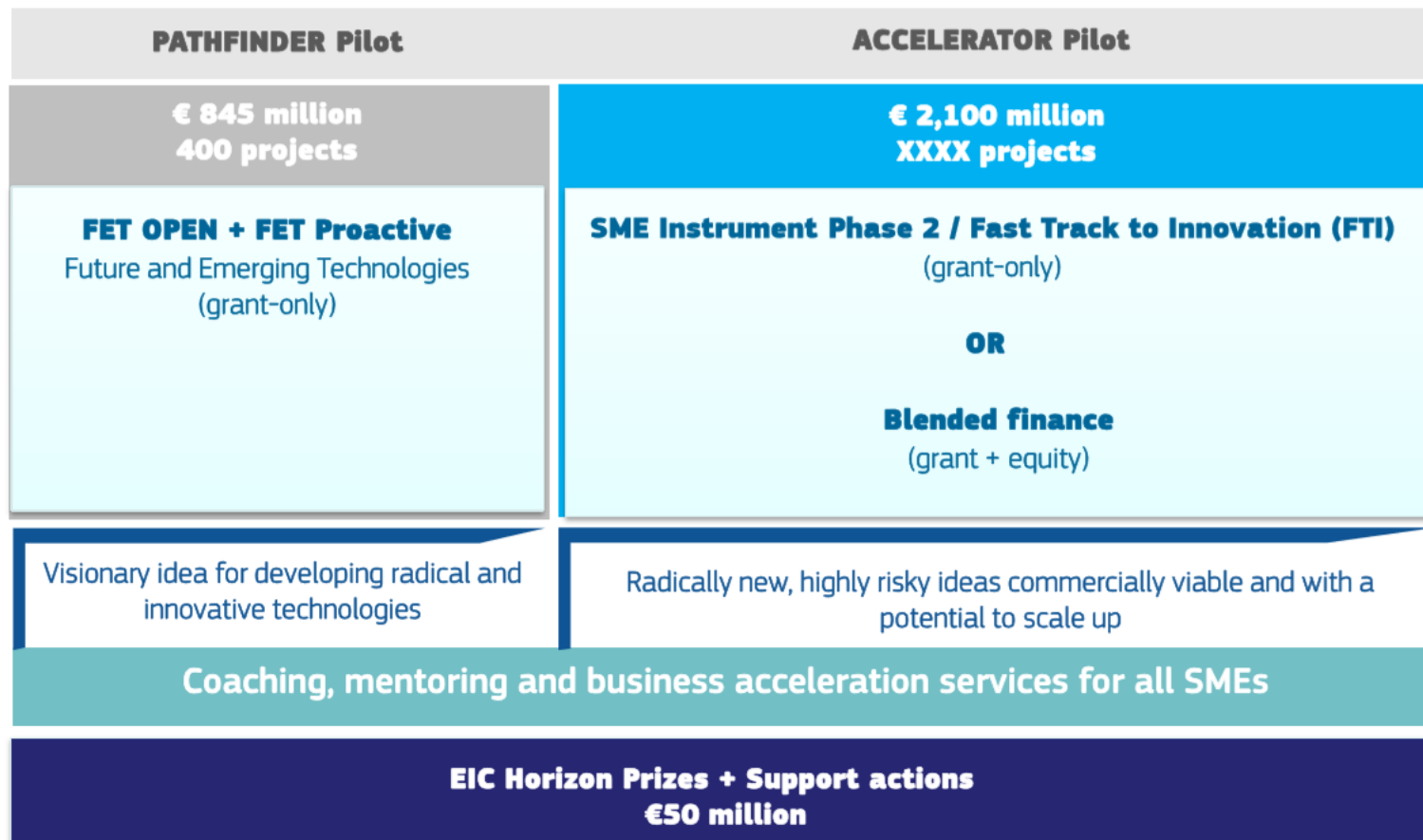
### Strengthening the European Research Area

Sharing Excellence

Reforming and Enhancing the EU Research and Innovation System

# European Innovation Council

## €3 billion-pilot package to support bottom-up ideas



## Piloto del EIC en 2019

[https://ec.europa.eu/info/news/enhanced-eic-pilot-be-launched-2019-request-european-council-2018-sep-10\\_en](https://ec.europa.eu/info/news/enhanced-eic-pilot-be-launched-2019-request-european-council-2018-sep-10_en)




English 

Home > News > Enhanced EIC pilot to be launched in 2019 as per request of European Council

NEWS | 10 September 2018 | Brussels, Belgium | Research and Innovation

# Enhanced EIC pilot to be launched in 2019 as per request of European Council

The European Commission have confirmed the intention to launch an enhanced European Innovation Council (EIC) pilot initiative in 2019, following the [European Council's request in July this year](#) .

The enhanced pilot will build on the proposed structure of the EIC under the [Horizon Europe](#) proposal to fast track disruptive and market-creating

## VI. Enlaces de interés e información



# Oficina Europea FECYT

V. Enlaces de interés e información

[www.eshorizonte2020.es](http://www.eshorizonte2020.es)

[www.oficinaeuropea.es](http://www.oficinaeuropea.es)



@esHorizonte2020



esHorizonte2020

Contacto NCPs

Listas de distribución



# ¡MUCHAS GRACIAS!

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