




Highlights on Open Calls

April 2020, Issue 13

For easy identification, new calls compared to the previous issue are marked with the symbol  on the left.
Updated information about calls compared to the previous issue are marked with the symbol  on the left.



Horizon 2020

ERC PROOF OF CONCEPT GRANT **Open for submission**

Topic: Call for proposals for ERC Proof of Concept Grant
Call identifier: ERC-2020-POC

The ERC Proof of Concept funding is made available only to those who already have an ERC award to establish proof of concept of an idea that was generated in the course of their ERC-funded projects. The activities to be funded shall draw substantially on this scientifically excellent ERC-funded research. However the additional funding is not aimed at extending the original research or predominantly concerned with overcoming obstacles to practical application. The funding will cover activities at the very early stage of turning research outputs into a commercial or socially valuable proposition, i.e. the initial steps of pre-competitive development.

Read more on:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/erc-2020-poc:freeTextSearchKeyword=:typeCodes=1;statusCodes=31094501,31094502;programCode=H2020;programDivisionCode=31047825;focusAreaCode=null;crossCuttingPriorityCode=null;callCode=Default;sortQuery=openingDate;orderBy=asc;onlyTenders=false;topicListKey=topicSearchTablePageState>

Horizon 2020 - Excellent Science- European Research Council (ERC)

Types of action: ERC-POC-LS
ERC Proof of Concept Lump Sum Pilot

Opening date: 15 October 2019

Deadline:

- 07 May 2020 17:00:00
- 17 September 2020 17:00:00



European Research Council
Established by the European Commission

FET-OPEN – NOVEL IDEAS FOR RADICALLY NEW TECHNOLOGIES **Open for submission**

Topic: FET Open: Challenging Current Thinking
Call identifier: FETOPEN-01-2020

The specific Challenge is to lay the foundations for radically new future technologies of any kind from visionary interdisciplinary collaborations that dissolve the traditional boundaries between sciences and disciplines, including the social sciences and humanities. This topic also encourages the driving role of new actors in research and innovation, including excellent young researchers, ambitious high-tech SMEs and first-time participants to FET under Horizon 2020 from across Europe. Proposals are sought for cutting-edge high-risk / high-impact interdisciplinary research with all of the following essential characteristics: Radical vision (enabled by a new technology concept that challenges current paradigms); Breakthrough technological target (a novel and ambitious science-to-technology breakthrough as a first proof of concept); Ambitious interdisciplinary research (for achieving the technological breakthrough and that opens up new areas of investigation).

Read more on:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/fetopen-01-2018-2019-2020;freeTextSearchKeyword=:typeCodes=1;statusCodes=31094501,31094502;programCode=H2020;programDivisionCode=31047826;focusAreaCode=null;crossCuttingPriorityCode=null;callCode=Default;sortQuery=openingDate;orderBy=asc;onlyTenders=false;topicListKey=topicSearchTablePageState>

Horizon 2020 - Excellent Science- Future and Emerging Technologies (FET)

Types of action: RIA Research and Innovation action

Opening date: 07 November 2017

Deadline: 03 June 2020 17:00:00



FET-OPEN – NOVEL IDEAS FOR RADICALLY NEW TECHNOLOGIES **Open for submission**

Topic: FET Innovation Launchpad
Call identifier: FETOPEN-03-2020

Short individual or collaborative actions focused on the non-scientific aspects and the early stages of turning a result of an ongoing or recently finished project funded through FET under FP7 or Horizon 2020 into a genuine innovation with socio-economic impacts.

Read more on:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/fetopen-03-2018-2019-2020;freeTextSearchKeyword=;typeCodes=1;statusCodes=31094501,31094502;programCode=H2020;programDivisionCode=31047826;focusAreaCode=null;crossCuttingPriorityCode=null;callCode=Default;sortQuery=openingDate;orderBy=asc;onlyTenders=false;topicListKey=topicSearchTablePageState>

Horizon 2020 - Excellent Science- Future and Emerging Technologies (FET)
Types of action: CSA-LSP
Coordination and support action Lump sum
Opening date: 09 October 2019
Deadline: 14 October 2020 17:00:00



★ FET PROACTIVE – BOOSTING EMERGING TECHNOLOGIES **Open for submission**

Topic: Environmental Intelligence
Call identifier: FETPROACT-EIC-08-2020

In the sub-topic "b. radically novel approaches to resilient, reliable and environmentally responsible in-situ monitoring", projects are to focus on one or a few critical resources (e.g., water, air) and to establish fundamental advances on the most critical challenges that will underpin a step improvement in monitoring, analysis and management of important social/environmental processes for improving quality of life and environmental sustainability (possibly including aspects of waste, noise). Proposals should look for ground-breaking concepts of affordable sensor deployment, spanning maintenance, communication and retrieval, possibly based on concepts like self-deployment, self-awareness, self-repair and controlled decomposition; or using new concepts from micro-robots to optimise sensing or increase monitoring frequency.

Read more on:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/fetproact-eic-08-2020;freeTextSearchKeyword=;typeCodes=1;statusCodes=31094501,31094502;programCode=H2020;programDivisionCode=31047826;focusAreaCode=null;crossCuttingPriorityCode=null;callCode=Default;sortQuery=openingDate;orderBy=asc;onlyTenders=false;topicListKey=topicSearchTablePageState>

Horizon 2020 - Excellent Science - Future and Emerging Technologies (FET)
Types of action: RIA
Research and Innovation action
Opening date: 19 December 2019
Deadline: 02 July 2020 17:00:00



★ FET FLAGSHIPS – TACKLING GRAND INTERDISCIPLINARY SCIENCE AND TECHNOLOGY CHALLENGES **Open for submission**

Topic: Quantum Flagship - ERA-NET Cofund
Call identifier: FETFLAG-04-2020

The specific challenge is to support transnational projects in quantum technologies, fostering synergy between European, national and regional initiatives and promoting broader partnerships between the European stakeholders in quantum technologies. Proposers are encouraged to implement other joint activities related to the coordination of public research and innovation programmes in quantum technologies, such as transnational networking, training, technology transfer and additional joint calls without EU co-funding.

Read more on:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/fetflag-04-2020;freeTextSearchKeyword=;typeCodes=1;statusCodes=31094501,31094502;programCode=H2020;programDivisionCode=31047826;focusAreaCode=null;crossCuttingPriorityCode=null;callCode=Default;sortQuery=openingDate;orderBy=asc;onlyTenders=false;topicListKey=topicSearchTablePageState>

Horizon 2020 - Excellent Science - Future and Emerging Technologies (FET)
Types of action: ERA-NET-Cofund ERA-NET Cofund
Opening date: 06 February 2020
Deadline: 02 July 2020 17:00:00



MARIE SKŁODOWSKA-CURIE INDIVIDUAL FELLOWSHIPS **Open for submission**

Topic: Individual Fellowships
Call identifier: MSCA-IF-2020

The goal of the Individual Fellowships is to enhance the creative and innovative potential of experienced researchers, wishing to diversify their individual competence in terms of skill acquisition through advanced training, international and intersectoral mobility. Individual Fellowships provide opportunities to researchers of any nationality to acquire and transfer new knowledge and to work on research and innovation in Europe (EU Member States and Horizon 2020 Associated Countries) and beyond. The scheme particularly supports the return and (re)integration of European researchers from outside Europe and those who have previously worked here, as well as researchers displaced by conflict outside the EU and Horizon 2020 Associated Countries. It also promotes the career restart of individual researchers who show great potential.

Horizon 2020 - Excellent Science - Marie-Sklodowska-Curie Actions
Types of action: MSCA-IF-GF Global Fellowships; MSCA-IF-EF-ST Standard European Fellowships; MSCA-IF-EF-SE Society and Enterprise panel; MSCA-IF-EF-RI Reintegration panel; MSCA-IF-EF-CAR Career Restart panel
Opening date: 08 April 2020
Deadline: 09 September 2020 17:00:00

Read more on:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/msca-if-2020;freeTextSearchKeyword=;typeCodes=1;statusCodes=31094501,31094502;programCode=H2020;programDivisionCode=31047830;focusAreaCode=null;crossCuttingPriorityCode=null;callCode=Default;sortQuery=openingDate;orderBy=asc;onlyTenders=false;topicListKey=topicSearchTablePageState>



MARIE SKŁODOWSKA-CURIE CO-FUNDING OF REGIONAL, NATIONAL AND INTERNATIONAL PROGRAMMES **Open for submission**

Topic: Co-funding of regional, national and international programmes

Call identifier: MSCA-COFUND-2020

The COFUND scheme aims to stimulate regional, national or international programmes to foster excellence in researchers' training, mobility and career development, spreading the best practices of the Marie Skłodowska-Curie actions. This will be achieved by co-funding new or existing regional, national, and international programmes to open up to, and provide for, international, intersectoral and interdisciplinary research training, as well as transnational and cross-sectoral mobility of researchers at all stages of their career.

Read more on:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/msca-cofund-2020;freeTextSearchKeyword=;typeCodes=1;statusCodes=31094501,31094502;programCode=H2020;programDivisionCode=31047830;focusAreaCode=null;crossCuttingPriorityCode=null;callCode=Default;sortQuery=openingDate;orderBy=asc;onlyTenders=false;topicListKey=topicSearchTablePageState>

Horizon 2020 - Excellent Science - Marie-Sklodowska-Curie Actions

Types of action: MSCA-COFUND-FP Fellowship programmes; MSCA-COFUND-DP Doctoral programmes

Opening date: 08 April 2020

Deadline: 29 September 2020 17:00:00



★ MARIE SKŁODOWSKA-CURIE RESEARCH AND INNOVATION STAFF EXCHANGE **Open for submission**

Topic: Research and Innovation Staff Exchange

Call identifier: MSCA-RISE-2020

The RISE scheme promotes international and cross-sector collaboration through exchanging research and innovation staff, and sharing knowledge and ideas from research to market (and vice-versa). The scheme fosters a shared culture of research and innovation that welcomes and rewards creativity and entrepreneurship and helps to turn creative ideas into innovative products, services or processes. RISE involves organisations from the academic and non-academic sectors (in particular SMEs), based in Europe (EU Member States and Horizon 2020 Associated Countries) and outside Europe (third countries). Support is provided for the development of partnerships in the form of a joint research and innovation project. This is aimed at knowledge sharing via international as well as intersectoral mobility, based on secondments of research and innovation staff (exchanges) with an in-built return mechanism.

Read more on:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/msca-rise-2020;freeTextSearchKeyword=;typeCodes=1;statusCodes=31094501,31094502;programCode=H2020;programDivisionCode=31047830;focusAreaCode=null;crossCuttingPriorityCode=null;callCode=Default;sortQuery=openingDate;orderBy=asc;onlyTenders=false;topicListKey=topicSearchTablePageState>

Horizon 2020 - Excellent Science - Marie-Sklodowska-Curie Actions

Types of action: MSCA-RISE RISE

Opening date: 05 December 2019

Deadline: 28 April 2020 17:00:00



★ BIO-BASED INDUSTRIES INNOVATION ACTION **Open for submission**

Topics:

- Research and innovation actions:
 - BBI2020.SO2.R1 — Use enabling technologies to improve feedstock availability and sustainability for the bio-based industry
 - BBI2020.SO2.R2 — Develop integral fractionation of lignocellulose to produce components for high-value applications
 - BBI2020.SO2.R3 — Develop bio-based solutions to recycle composites
 - BBI2020.SO2.R4 — Extract bioactive compounds from new, underexploited and/or recalcitrant residual bio-based streams for high-value applications
 - BBI2020.SO3.R5 — Improve the sustainability of coatings
- Innovations actions – demonstration actions:
 - BBI2020.SO1.D1 — Resolve supply-chain hurdles for turning residual waste streams into functional molecules for food and/or non-food market applications
 - BBI2020.SO1.D2 — Use biogenic gaseous carbon to increase feedstock availability for the industry
 - BBI2020.SO2.D3 — Upscale the production of bio-based platform molecules for larger market applications
 - BBI2020.SO3.D4 — Demonstrate superior bio-based packaging solutions with minimal environmental damage
- Innovation actions – flagship actions:
 - BBI2020.SO1.F1 — Turn lignin into materials and chemicals for high-end applications
 - BBI2020.SO1.F2 — Produce food ingredients with high nutritional value from aquatic sources

Horizon 2020 - Industrial Leadership

Types of action: Research and Innovation action; Innovation action – Demonstration; Innovation action – Flagship; Coordination and Support action

Opening date: 15 April 2020

Deadline: 03 September 2020 17:00:00



- Coordination and support actions:
 - BBI2020.SO4.S1 — Help start-ups and spin-offs to gain access to finance
 - BBI2020.SO4.S2 — Provide insight on emerging technologies for bio-based value chains
 - BBI2020.SO4.S3 — Create and interlink bio-based education centres to meet industry's needs of skills and competences
 - BBI2020.SO4.S4 — Expand circular economy to include the underexploited circular bioeconomy

Call identifier: H2020-BBI-JTI-2020

The call aims to:

- Strategic orientation 1: foster supply of sustainable biomass feedstock to feed both existing and new value chains (Improve the utilisation of existing feedstock sources; Expand the exploitation of under-utilised or new feedstock for the bio-based industries).
- Strategic orientation 2: optimise efficient processing for integrated biorefineries through research, development and innovation R&D&I (Pre-treatment; Conversion of pre-treated feedstocks to bio-based chemicals and materials; Downstream processing; System modelling).
- Strategic orientation 3: develop innovative bio-based products for identified market applications (Bio-based products that outperform fossil-based counterparts).
- Strategic orientation 4: create and accelerate the market uptake of bio-based products and applications.

These pillars form the four strategic orientations of the bio-based industry in Europe. Each strategic orientation, or SO, has sub-orientations.

Read more on:

<https://www.bbi-europe.eu/participate/call-proposals-2020>

EVENT:

22 April 2020 - Info Day (also in streaming)

<https://bbi-europe.eu/events/bbi-ju-info-day-2020>

FAST TRACK TO INNOVATION (FTI) **Open for submission**

Topic: Fast Track to Innovation (FTI)

Call identifier: EIC-FTI-2018-2020

FTI supports actions undertaking innovation from the demonstration stage through to market uptake, including activities such as piloting, test-beds, systems validation in real-world working conditions, validation of business models, pre-normative research, and standard-setting. If your proposal involves technological innovation, your consortium should declare that the technology or the technologies concerned are at least at Technology Readiness Level (TRL) 6. The intention will be to bring the TRL up to 8 for technological innovations and to an analogous level of maturity for non-technological innovations during the lifetime of the FTI action.

Read more on:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/eic-fti-2018-2020;freeTextSearchKeyword=:typeCodes=1;statusCodes=31094501,31094502;programCode=H2020;programDivisionCode=:focusAreaCode=null;crossCuttingPriorityCode=null;callCode=Default;sortQuery=openingDate;orderBy=asc;onlyTenders=false;topicListKey=topicSearchTablePageState>

Horizon 2020 - Leadership in enabling and industrial technologies (LEIT) - Industrial Leadership

Types of action: IA Innovation action

Opening date: 07 November 2017

Deadline:

- 09 June 2020 17:00:00
- 27 October 2020 17:00:00



★ **TRANSFORMING EUROPEAN INDUSTRY** **Open for submission**

Topic: New biotechnologies to remediate harmful contaminants (Focus area: Connecting economic and environmental gains - the Circular Economy)

Call identifier: CE-BIOTEC-08-2020

Proposals should cover the following activities:

- Research and innovation for efficient and low cost remediation strategies using microorganisms by means of emerging biotechnologies that require minimum or zero external energy or chemicals and that reduce the remediation time compared to physicochemical processes;
- Work to ensure remediation in soil, sediments, mines, surface water, groundwater or industrial water;
- Develop a system to remove different contaminants, including complex mixtures, covering hydrocarbons and their derivatives, recalcitrant compounds, metals, nanomaterials, paints and coatings, nutrients, pharmaceuticals or micropollutants and toxic contaminants;
- Include field trials to prove an acceptable performance for field applications will be a plus.

This topic is part of the EU-China flagship initiative on Biotechnology for Environment and Human Health, which will promote substantial coordinated and balanced research and

Horizon 2020 - Leadership in enabling and industrial technologies (LEIT) - Industrial Leadership

Types of action: RIA Research and Innovation action

Opening date: 03 July 2019

Deadline: 19 June 2020 17:00:00



innovation cooperation between the EU and China. China-based legal entities have to apply for funding under the Chinese co-funding mechanism with the National Natural Science Foundation of China (NSFC).

Activities should start at TRL 3 and achieve TRL 6 at the end of the project.

Read more on:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/ce-biotec-08-2020;freeTextSearchKeyword=;typeCodes=1;statusCodes=31094501,31094502;programCode=H2020;programDivisionCode=31047848;focusAreaCode=null;crossCuttingPriorityCode=null;callCode=Default;sortQuery=openingDate;orderBy=asc;onlyTenders=false;topicListKey=topicSearchTablePageState>

ECSEL-2-RIA Open for submission

Topics: Energy; Transport & Smart Mobility; Health and Wellbeing; Digital Industry; Digital Life; Systems and Components: Architecture, Design and Integration; Connectivity and Interoperability; Safety, Security and Reliability; Computing and Storage; Process Technology, Equipment, Materials and Manufacturing for Electronic Components & Systems; Long-term vision

Call identifier: ECSEL-2020-2-RIA

An ECSEL Research and Innovation Action (RIA) primarily consists of activities aiming to establish new knowledge and/or to explore the feasibility of a new or improved technology, product, process, service, method, tool or solution. For this purpose they may include applied research, technology development and/or method/tool and integration, testing and validation on a small-scale prototype in a laboratory or simulated environment. The activities have their centre of gravity at TRL 3-4.

A RIA proposal is characterised by:

- Execution by a consortium that may consist of SMEs, large enterprises, universities, institutes, public organizations;
- Developing innovative technologies and/or using them in innovative ways;
- Targeting demonstration of the innovative approach in a relevant product, service or capability, clearly addressing the applications relevant for societal challenges in relation with the ECSEL Strategic Thrusts as outlined in the ECSEL MASP;
- Demonstrating value and potential in a realistic lab environment reproducing the targeted application;
- Having a deployment plan showing the valorisation for the ECSEL ecosystem and the contribution to the ECSEL goals and objectives.
- In order to maximize effective implementation of the ECSEL top-level objectives, the list of RIA proposals to be retained for public funding shall constitute a balanced portfolio of projects developing innovative technologies (as defined in the MASP in the essential technology section) and applying them in different domains as defined in the MASP (as defined in the application trust section).

Read more on:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/ecsel-2020-2-ria;freeTextSearchKeyword=;typeCodes=1;statusCodes=31094501,31094502;programCode=H2020;programDivisionCode=31047848;focusAreaCode=null;crossCuttingPriorityCode=null;callCode=Default;sortQuery=openingDate;orderBy=asc;onlyTenders=false;topicListKey=topicSearchTablePageState>

ECSEL-IA Open for submission

Topics: Energy; Transport & Smart Mobility; Health and Wellbeing; Digital Industry; Digital Life; Systems and Components: Architecture, Design and Integration; Connectivity and Interoperability; Safety, Security and Reliability; Computing and Storage; Process Technology, Equipment, Materials and Manufacturing for Electronic Components & Systems; Long-term vision

Call identifier: ECSEL-2020-1-IA

An ECSEL Innovation Action (IA) primarily consists of activities aiming at pilot lines, test beds, demonstrators, innovation pilots and zones of full-scale testing. These activities produce plans and arrangements or designs for new, altered or improved products, processes, methods and tools or services. For this purpose they may include prototyping, testing, demonstrating, piloting, largescale product validation and market replication.

The activities have their centre of gravity at the TRL 5-8. An IA proposal in ECSEL JU is characterized by:

- Execution by an industrial consortium that may consist of large and SM enterprises but also including universities, institutes, public organizations;
- Using innovative technology;
- Developing and demonstrating innovative solutions in relation with the ECSEL Strategic Thrusts as outlined in the ECSEL MASP;
- Establishment of a new and realistic innovation environment connected with an industrial

Horizon 2020 - Leadership in enabling and industrial technologies (LEIT) - Industrial Leadership

Types of action: RIA Research and Innovation Action

Opening date: 05 February 2020

Deadline:

- 05 May 2020 17:00:00 (1st stage)
- 16 September 2020 17:00:00 (2nd stage)



ECSEL Joint Undertaking
Electronic Components and Systems for European Leaders

Horizon 2020 - Leadership in enabling and industrial technologies (LEIT) - Industrial Leadership

Types of action: IA Innovation action

Opening date: 05 February 2020

Deadline:

- 05 May 2020 17:00:00 (1st stage)
- 16 September 2020 17:00:00 (2nd stage)



ECSEL Joint Undertaking
Electronic Components and Systems for European Leaders

environment, such as:

- a pilot line facility capable of manufacturing
- a zone of full-scale testing;
- a development of new processes or tools and their introduction in several domains;
- the development of frameworks or platforms together with the usage of these frameworks or platforms in innovative products.
- Having a deployment plan leading to short to mid term economic value creation in Europe.
- In order to maximize effective implementation of the ECSEL top-level objectives, the list of IA proposals to be retained for public funding should constitute a balanced portfolio of projects applying innovative technologies

Read more on:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/ecsel-2020-1-ia:freeTextSearchKeyword=:typeCodes=1;statusCodes=31094501,31094502;programCode=H2020;programDivisionCode=31047848;focusAreaCode=null;crossCuttingPriorityCode=null;callCode=Default;sortQuery=openingDate;orderBy=asc;onlyTenders=false;topicListKey=topicSearchTablePageState>

★ BETTER HEALTH AND CARE, ECONOMIC GROWTH AND SUSTAINABLE HEALTH SYSTEMS **Open for submission**

Topic: Micro- and nano-plastics in our environment: Understanding exposures and impacts on human health

Call identifier: SC1-BHC-36-2020

Global plastic production has increased exponentially over the past decades. A significant proportion of the plastic produced is not disposed of properly and persists in the environment, especially the marine environment. Plastic products can be slowly degraded into smaller pieces (micro- or even nanoplastics). Furthermore, micro-plastics are intentionally added to, for example, toothpaste and beauty products (referred to as microbeads) or are a secondary by-product of rubber from, e.g. textiles, tyre wear or artificial turf. Plastic debris is associated with a "cocktail of contaminants" made up of chemical ingredients present originally in the plastic and chemical pollutants adsorbed to the plastic from the environment, including metals and other persistent contaminants such as polychlorinated biphenyls (PCBs) and flame retardants. The debris is filtered into marine species' gastrointestinal tract mechanically or it may look like food to some species, thus entering the food chain, with unknown effects.

Proposals should use innovative approaches to provide policy relevant scientific data in support of improved human health hazard and risk assessment of micro and/or nano-plastics.

Read more on:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/sc1-bhc-36-2020;freeTextSearchKeyword=:typeCodes=1;statusCodes=31094501,31094502;programCode=H2020;programDivisionCode=31047894;focusAreaCode=null;crossCuttingPriorityCode=null;callCode=Default;sortQuery=openingDate;orderBy=asc;onlyTenders=false;topicListKey=topicSearchTablePageState>

Horizon 2020 - Societal Challenges - Health, demographic change and wellbeing

Types of action: RIA Research and Innovation action

Opening date: 04 July 2019

Deadline: 04 June 2020 17:00:00



★ FCH2 JU CALL FOR PROPOSALS 2020 **Open for submission**

Topics:

- FCH-01-1-2020: Development of hydrogen tanks for electric vehicle architectures
- FCH-01-2-2020: Durability-Lifetime of stacks for Heavy Duty trucks
- FCH-01-3-2020: Liquid Hydrogen on-board storage tanks
- FCH-01-4-2020: Standard Sized FC module for Heavy Duty applications
- FCH-01-5-2020: Demonstration of FC Coaches for regional passenger transport
- FCH-01-6-2020: Demonstration of liquid hydrogen as a fuel for segments of the waterborne sector
- FCH-01-7-2020: Extending the use cases for FC trains through innovative designs and streamlined administrative framework
- FCH-01-8-2020: Scale-up and demonstration of innovative hydrogen compressor technology for full-scale hydrogen refuelling station
- FCH-02-1-2020: Catalyst development for improved economic viability of LOHC technology
- FCH-02-2-2020: Highly efficient hydrogen production using solid oxide electrolysis integrated with renewable heat and power
- FCH-02-3-2020: Diagnostics and Control of SOE
- FCH-02-4-2020: Flexi-fuel stationary SOFC
- FCH-02-5-2020: Underground storage of renewable hydrogen in depleted gas fields and other geological stores
- FCH-02-6-2020: Electrolyser module for offshore production of renewable hydrogen
- FCH-02-7-2020: Cyclic testing of renewable hydrogen storage in a small salt cavern
- FCH-02-8-2020: Demonstration of large-scale co-electrolysis for the Industrial Power-to-X market
- FCH-02-9-2020: Fuel cell for prime power in data-centres
- FCH-03-1-2020: HT proton conducting ceramic materials for highly efficient and flexible operation
- FCH-03-2-2020: Decarbonising islands using renewable energies and hydrogen - H2

Horizon 2020 - Societal Challenges - Secure, clean and efficient energy

Types of action: RIA Research and Innovation action, IA Innovation action, CSA Coordination and support action

Opening date: 14 January 2020

Deadline: 29 April 2020 17:00:00



FUEL CELLS AND HYDROGEN
JOINT UNDERTAKING

Islands

- FCH-04-1-2020: Overcoming technical and administrative barriers to deployment of multi-fuel hydrogen refuelling stations (HRS)
- FCH-04-2-2020: PNR on hydrogen-based fuels solutions for passenger ships
- FCH-04-3-2020: Development of eco-design guidelines for FCH products
- FCH-04-4-2020: Development and validation of existing and novel recycling technologies for key FCH products
- FCH-04-5-2020: Guidelines for Life Cycle Sustainability Assessment (LCSA) of fuel cell and hydrogen systems

Call identifier: H2020-JTI-FCH-2020

The call includes 24 topics aimed at addressing the current objectives for the Transport and Energy pillars, as well as Overarching and Crosscutting activities:

- reduce the production cost of fuel cell systems to be used in transport applications, while increasing their lifetime to levels competitive with conventional technologies
- increase the electrical efficiency and the durability of the different fuel cells used for CHP and power only production, while reducing costs, to levels competitive with conventional technologies
- increase the energy efficiency of production of hydrogen mainly from water electrolysis and renewable sources while reducing operating and capital costs

demonstrate on a large scale the feasibility of using hydrogen to support integration of renewable energy sources into the energy systems

reduce the use of the EU defined "Critical raw materials", for example via low platinum resources, and through recycling or reducing or avoiding the use of rare earth elements.

Read more on:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-search?typeCodes=1;callCode=H2020-JTI-FCH-2020-1;programCode=H2020;statusCodes=31094501,31094502,31094503;topicListKey=callTopicSearchTableState>

★ EIC HORIZON PRIZE FOR 'FUEL FROM THE SUN: ARTIFICIAL PHOTOSYNTHESIS' **Open for submission**

Topic: EIC Horizon Prize for 'Fuel from the Sun: Artificial Photosynthesis'

Call identifier: Sunfuel-EICPrize-2021

The challenge is to build a fully functional, bench-scale prototype of an artificial photosynthesis based system which is able to produce a useable synthetic fuel. Due to its ability to use a combination of sunlight, water and carbon from the air to produce energy, artificial photosynthesis is regarded as a potential breakthrough energy technology. For the purpose of this prize, artificial photosynthesis (AP) is understood to be a process that aims at mimicking the physical chemistry of natural photosynthesis by absorbing solar energy in the form of photons. The solution is required to use this energy to generate fuel molecules through a synthetic system to be delivered as a single integrated device that utilises either biomimetic, nanotechnology, synthetic biology or a combination of these systems.

Read more on:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/sunfuel-eicprize-2021;freeTextSearchKeyword=;typeCodes=1;statusCodes=31094501,31094502;programCode=H2020;programDivisionCode=31047938;focusAreaCode=null;crossCuttingPriorityCode=null;callCode=Default;sortQuery=openingDate;orderBy=asc;onlyTenders=false;topicListKey=topicSearchTablePageState>

Horizon 2020 - Societal Challenges - Secure, clean and efficient energy

Types of action: IPr Inducement Prize

Opening date: 12 December 2017

Deadline: 03 February 2021 17:00:00



➔ BUILDING A LOW-CARBON, CLIMATE RESILIENT FUTURE: SECURE, CLEAN AND EFFICIENT ENERGY **Open for submission**

Topic: Efficient combination of Concentrated Solar Power and desalination (with particular focus on the Gulf Cooperation Council (GCC) region) (Building a low-carbon, climate resilient future)

Call identifier: LC-SC3-2020

Several arid and semi-arid regions of the world are highly dependent on desalination and the demand for desalination is projected to grow. Many of these regions have also an abundant solar resource, which is suitable for the application of Concentrated Solar Power (CSP). Several technical aspects need to be addressed to match the thermal cycle of a CSP plant to the energy needs of a desalination system in an effective way. The proposals are expected to bring technologies to TRL 6 at the end of the project activities.

In line with the strategy for EU international cooperation in research and innovation, international cooperation is encouraged, in particular with Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates. The participation of organisations from these countries as partners in the project will be positively evaluated.

The expected impacts are a substantial reduction of CO₂ emissions from desalination and strengthened international cooperation. This will support the objectives of the many international initiatives that are currently addressing the crucial nexus between energy and water systems.

Read more on:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/lc-sc3-res-20->

Horizon 2020 - Societal Challenges - Secure, clean and efficient energy

Types of action: IA Innovation action

Opening date: 05 May 2020

Deadline: 01 September 2020 17:00:00



[2020;freeTextSearchKeyword=;typeCodes=1;statusCodes=31094501,31094502;programCode=H2020;programDivisionCode=31047938;focusAreaCode=null;crossCuttingPriorityCode=null;callCode=Default;sortQuery=openingDate;orderBy=asc;onlyTenders=false;topicListKey=topicSearchTablePageState](https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/lc-sc3-res-26-2020;freeTextSearchKeyword=;typeCodes=1;statusCodes=31094501,31094502;programCode=H2020;programDivisionCode=31047938;focusAreaCode=null;crossCuttingPriorityCode=null;callCode=Default;sortQuery=openingDate;orderBy=asc;onlyTenders=false;topicListKey=topicSearchTablePageState)

★ SECURE, CLEAN AND EFFICIENT ENERGY **Open for submission**

Topic: Development of next generation renewable fuel technologies from CO₂ and renewable energy - Power and Energy to Renewable Fuels (Building a low-carbon, climate resilient future)

Call identifier: LC-SC3-RES-26-2020

The specific challenge is to increase the competitiveness of next generation renewable fuels through efficiently integrating unexploited renewable energy sources in their production process and to foster their use as a renewable energy storage option taking advantage of the existing infrastructure for gaseous and liquids fuels. Proposals will develop next generation renewable fuels for energy and transport, which improve substantially (beyond the state-of-the-art), the performance regarding energy efficiency as well as cost of the conversion of direct renewable energy or renewable electricity and /or heat to liquid or gaseous renewable fuels from CO₂. Targeted fuels should also provide very low engine-out emissions. Proposals are expected to bring the technology from TRL 3-4 to 4-5.

Read more on:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/lc-sc3-res-26-2020;freeTextSearchKeyword=;typeCodes=1;statusCodes=31094501,31094502;programCode=H2020;programDivisionCode=31047938;focusAreaCode=null;crossCuttingPriorityCode=null;callCode=Default;sortQuery=openingDate;orderBy=asc;onlyTenders=false;topicListKey=topicSearchTablePageState>

Horizon 2020 - Societal Challenges - Secure, clean and efficient energy

Types of action: RIA Research and Innovation action

Opening date: 03 December 2019

Deadline: 28 April 2020 17:00:00



★ SECURE, CLEAN AND EFFICIENT ENERGY **Open for submission**

Topic: Combined clean biofuel production and phytoremediation solutions from contaminated lands worldwide (Building a low-carbon, climate resilient future)

Call identifier: LC-SC3-RES-37-2020

Proposals will bridge the gap between phytoremediation strategies and clean liquid biofuel production. They will optimise energy crops for phytoremediation by targeting different classes of known soil pollutants and integrate in the conversion process to biofuels a strategy to extract these pollutants in concentrated form. The overall process will be optimized in terms of cost and sustainability. Pilot-scale, small trials are expected for both clean biofuel production and phytoremediation processes. Proposals are expected to bring technologies from TRL 3-4 to TRL 4-5.

Read more on:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/lc-sc3-res-37-2020;freeTextSearchKeyword=;typeCodes=1;statusCodes=31094501,31094502;programCode=H2020;programDivisionCode=31047938;focusAreaCode=null;crossCuttingPriorityCode=null;callCode=Default;sortQuery=openingDate;orderBy=asc;onlyTenders=false;topicListKey=topicSearchTablePageState>

Horizon 2020 - Societal Challenges - Secure, clean and efficient energy

Types of action: RIA Research and Innovation action

Opening date: 03 December 2019

Deadline: 28 April 2020 17:00:00



COMPETITIVE, LOW CARBON AND CIRCULAR INDUSTRIES **Forthcoming**

Topic: Industrial (Waste) Heat-to-Power conversion (Building a low-carbon, climate resilient future)

Call identifier: LC-SC3-CC-9-2020

Better use of process excess/waste heat represents a significant source of energy savings for industries. In a context of reducing greenhouse gas emissions and introducing the concept of circular economy in heat management in view of industrial process electrification, European industries have a clear interest in finding new ways to capture the heat produced by their process and to reuse it or to produce electricity. Proposals will integrate an industrial waste heat-to-power conversion system using one type of fluid (supercritical CO₂ or organic) and demonstrate the system operation in industrial environment at an output power level of at least 2 MW, with improved cost efficiency compared to existing solutions. Proposals are expected to bring the technologies to TRL 6 or 7.

Read more on:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/lc-sc3-cc-9-2020;freeTextSearchKeyword=;typeCodes=1;statusCodes=31094501,31094502;programCode=H2020;programDivisionCode=31047938;focusAreaCode=null;crossCuttingPriorityCode=null;callCode=Default;sortQuery=openingDate;orderBy=asc;onlyTenders=false;topicListKey=topicSearchTablePageState>

Horizon 2020 - Societal Challenges - Secure, clean and efficient energy

Types of action: IA Innovation action

Opening date: 05 May 2020

Deadline: 01 September 2020 17:00:00



COMPETITIVE, LOW CARBON AND CIRCULAR INDUSTRIES **Forthcoming**

Topic: Low carbon industrial production using CCUS (Building a low-carbon, climate resilient future)

Call identifier: LC-SC3-NZE-5-2020

Carbon Capture Utilization and Storage (CCUS) in industrial applications faces significant challenges due to its high cost and the fierce international competition in the sectors concerned. However, these sectors currently account for 20% of global CO₂ emissions, and in the 2 degree scenario, should represent half of the stored CO₂ by 2050. Relevant sectors with high CO₂ emissions are for example steel, iron and cement making, oil refining, gas processing, hydrogen production, biofuel production and waste incineration plants. Projects will focus on integrating CO₂ capture in industrial installations, whilst addressing the full CCUS chain. Projects will elaborate a detailed plan on how to use the results, i.e. the subsequent transport, utilisation and/or underground storage of the captured CO₂. Important aspects to address are of technical (e.g. the optimised integration of capture plant with industrial processes; scalability; CO₂ purity), safety (e.g. during transportation and storage), financial (e.g. cost of capture; cost of integration) and strategic nature (e.g. business models; operation and logistics of industrial clusters and networks). Projects are expected to bring technologies to TRL 6-7.

Read more on:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/lc-sc3-nze-5-2020;freeTextSearchKeyword=;typeCodes=1;statusCodes=31094501,31094502;programCode=H2020;programDivisionCode=31047938;focusAreaCode=null;crossCuttingPriorityCode=null;callCode=Default;sortQuery=openingDate;orderBy=asc;onlyTenders=false;topicListKey=topicSearchTablePageState>

Horizon 2020 - Societal Challenges - Secure, clean and efficient energy

Types of action: IA Innovation action

Opening date: 05 May 2020

Deadline: 01 September 2020 17:00:00



BUILDING A LOW-CARBON, CLIMATE RESILIENT FUTURE: SECURE, CLEAN AND EFFICIENT ENERGY **Forthcoming**

Topic: International cooperation with Japan for Research and Innovation on advanced biofuels and alternative renewable fuels (Building a low-carbon, climate resilient future)

Call identifier: LC-SC3-RES-25-2020

Disruptive conversion technologies are needed for replacing completely the use of fossil fuels in the transport and heating sectors with advanced biofuels and alternative renewable fuels. International collaboration is mutually beneficial in strategic areas where knowledge can be exchanged and Europe can obtain leadership together with its international partners. Proposals will aim at international cooperation with Japan involving Japanese organisations in the consortia for the development of disruptive catalytic technologies, by developing novel catalysts and linked lab-scale components/systems with significantly improved performance for conversion efficiency and specific marginal cost reduction for obtaining low-cost bioenergy carriers, non-food/feed based advanced biofuels and alternative renewable fuels (excluding hydrogen) and maximizing GHG abatement. Proposals are expected to bring technologies to TRL 3. Due to the specific challenge of this topic, in addition to the minimum number of participants set out in the General Annexes, proposals must include at least one legal entity established in Japan.

Read more on:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/lc-sc3-res-25-2020;freeTextSearchKeyword=;typeCodes=1;statusCodes=31094501,31094502;programCode=H2020;programDivisionCode=31047938;focusAreaCode=null;crossCuttingPriorityCode=null;callCode=Default;sortQuery=openingDate;orderBy=asc;onlyTenders=false;topicListKey=topicSearchTablePageState>

Horizon 2020 - Societal Challenges - Secure, clean and efficient energy

Types of action: RIA Research and Innovation action

Opening date: 05 May 2020

Deadline: 01 September 2020 17:00:00



BUILDING A LOW-CARBON, CLIMATE RESILIENT FUTURE: SECURE, CLEAN AND EFFICIENT ENERGY **Forthcoming**

Topic: International Cooperation with USA and/or China on alternative renewable fuels from sunlight for energy, transport and chemical storage (Building a low-carbon, climate resilient future)

Call identifier: LC-SC3-RES-3-2020

Proposals will aim at international cooperation with the USA and/or China on targeted research activities for obtaining advanced biofuels and alternative renewable fuels for energy and transport through photochemical/ photobiological or electrochemical reaction. At least one of the following technology-specific challenges has to be addressed: Improved light-harvesting and efficient charge separation in photocatalytic systems; Photoelectrochemical cells – PECs and catalyst development; Improved light harvesting coupled with improved CO₂ reduction efficiency in synthetic biological systems. Proposals are expected to bring technologies to TRL 3-4. Due to the specific challenge of this topic, in addition to the minimum number of participants set out in the General Annexes, proposals must include at least one participant established in the following countries: USA or China.

Read more on:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/lc-sc3-res-3-2020;freeTextSearchKeyword=;typeCodes=1;statusCodes=31094501,31094502;programCode=H2020;programDivisionCode=31047938;focusAreaCode=null;crossCuttingPriorityCode=null;callCode=Default;sortQuery=openingDate;orderBy=asc;onlyTenders=false;topicListKey=topicSearchTablePageState>

Horizon 2020 - Societal Challenges - Secure, clean and efficient energy

Types of action: RIA Research and Innovation action

Opening date: 05 May 2020

Deadline: 01 September 2020 17:00:00



BUILDING A LOW-CARBON, CLIMATE RESILIENT FUTURE: SECURE, CLEAN AND EFFICIENT ENERGY **Forthcoming**

Topic: Demonstration of innovative and sustainable hydropower solutions targeting unexplored small-scale hydropower potential in Central Asia (Building a low-carbon, climate resilient future)

Call identifier: LC-SC3-RES-34-2020

The challenge is to demonstrate innovative solutions targeting unexploited small-scale hydropower potential in Central Asia that will contribute to solve the particular cross-border water and energy management challenges in the region. The demonstration will provide solutions for realising innovative and sustainable hydropower, based on synergies between innovative European hydropower technology, research and industry partners, and the Central Asian hydropower sector. Therefore, the demonstration activities shall take place in Central Asia (Kazakhstan, the Kyrgyz Republic, Tajikistan, Turkmenistan or Uzbekistan), with participation of local partners. Proposals are expected to bring the technology from TRL 6-7 to 7-8.

Read more on:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/lc-sc3-res-34-2020;freeTextSearchKeyword=;typeCodes=1;statusCodes=31094501,31094502;programCode=H2020;programDivisionCode=31047938;focusAreaCode=null;crossCuttingPriorityCode=null;callCode=Default;sortQuery=openingDate;orderBy=asc;onlyTenders=false;topicListKey=topicSearchTablePageState>

Horizon 2020 - Societal Challenges - Secure, clean and efficient energy

Types of action: IA Innovation action

Opening date: 05 May 2020

Deadline: 01 September 2020 17:00:00



BUILDING A LOW-CARBON, CLIMATE RESILIENT FUTURE: SECURE, CLEAN AND EFFICIENT ENERGY **Forthcoming**

Topic: International cooperation with Canada on advanced biofuels and bioenergy (Building a low-carbon, climate resilient future)

Call identifier: LC-SC3-RES-36-2020

The optimisation of advanced biomass supply chains and overcoming specific conversion technology barriers are needed to improve the market up-take of sustainable advanced biofuels and bioenergy and accelerate their deployment for replacing the use of fossil fuels in the transport, power and heating sectors. International collaboration is mutually beneficial in strategic areas where knowledge can be exchanged and Europe can obtain leadership together with its international partners. Proposals will aim at international cooperation with Canada for fostering the deployment of advanced biofuels and bioenergy while substantially decreasing the costs of the feedstock supply or the conversion process. Proposals should address at least one of the following issues:

- Development of the full supply chain of biomass-to-bioenergy applications including intermediate bioenergy carriers, advanced biofuels, heat and power generation. Sustainable biomass production and collection strategies that facilitate sustainable bioenergy production and decrease feedstock supply costs will be included. All types of non-food/feed biomass including forestry, agricultural and their residues, organic fractions of municipal and industrial wastes can be targeted.
- Thermochemical, biochemical and chemical processing of sustainable biomass to advanced biofuels focusing on the pre-treatment and the conversion process and in particular on reducing the respective marginal cost.

Proposals are expected to bring the technology from TRL 3 to TRL 5. Due to the specific challenge of this topic, in addition to the minimum number of participants set out in the General Annexes, proposals must include at least one legal entity established in Canada.

Read more on:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/lc-sc3-res-36-2020;freeTextSearchKeyword=;typeCodes=1;statusCodes=31094501,31094502;programCode=H2020;programDivisionCode=31047938;focusAreaCode=null;crossCuttingPriorityCode=null;callCode=Default;sortQuery=openingDate;orderBy=asc;onlyTenders=false;topicListKey=topicSearchTablePageState>

Horizon 2020 - Societal Challenges - Secure, clean and efficient energy

Types of action: RIA Research and Innovation action

Opening date: 05 May 2020

Deadline: 01 September 2020 17:00:00



★ **CLEAN SKY 2 CALL FOR PROPOSALS 11 Open for submission**

Topic: Investigation and modelling of hydrogen effusion in electrochemically plated ultra-high-strength-steels used for landing gear structures

Call identifier: JTI-CS2-2020-CFP11-SYS-03-25

The aim of this project is to understand the underlying phenomena and create a verified model of the influence of undesirable layer structures of electrochemically deposited corrosion protection layers of ultra-high-strength-steel parts on hydrogen degassing. This shall allow predicting the remaining hydrogen concentration in steel parts and the probability for hydrogen embrittlement. The industrial objective is to minimise rework and scrap of ultra-high-strength-steel parts and the related environmental impacts.

Read more on:

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/jti-cs2-2020-cfp11-sys-03->

Horizon 2020 - Societal Challenges - Smart, green and integrated transport

Types of action: Research and Innovation action

Opening date: 28 January 2020

Deadline: 12 May 2020 17:00:00



[25;freeTextSearchKeyword=:typeCodes=1;statusCodes=31094501,31094502;programCode=H2020;programDivisionCode=31047956;focusAreaCode=null;crossCuttingPriorityCode=null;callCode=Default;sortQuery=openingDate;orderBy=asc;onlyTenders=false;topicListKey=topicSearchTablePageState](https://www.epa.europa.eu/h2o/25;freeTextSearchKeyword=:typeCodes=1;statusCodes=31094501,31094502;programCode=H2020;programDivisionCode=31047956;focusAreaCode=null;crossCuttingPriorityCode=null;callCode=Default;sortQuery=openingDate;orderBy=asc;onlyTenders=false;topicListKey=topicSearchTablePageState)

ERA-NET COFUND RISKS POSED TO HUMAN HEALTH AND THE ENVIRONMENT BY POLLUTANTS AND PATHOGENS PRESENT IN WATER RESSOURCES **Open for submission**

Horizon 2020 - Joint Call for Proposals

Topics: 1) Measuring – Environmental behaviour of contaminants of emerging concern (CECs), pathogens and antimicrobial resistant bacteria in aquatic ecosystems; 2)Evaluating – Risk assessment and management of CECs, pathogens and antimicrobial resistant bacteria from aquatic ecosystems (inland and marine) to human health and environment; 3) Taking Actions – Strategies to reduce CECs, pathogens and antimicrobial resistant bacteria in aquatic ecosystems (inland and marine)

Call identifier: AquaticPollutants

The call AquaticPollutants will support research and innovation projects that establish integrated and cross-sectoral approaches for risk-management combining the research areas of contaminants of emerging concerns (CECs), pathogens and antimicrobial resistance. The whole water cycle, from the source through the river basins and eventually to the estuaries and oceans, has to be considered. The projected call budget is approximately 25 million Euro (co-funded by European Commission). There are still major risks associated with the occurrence of emerging contaminants, pathogens and antimicrobial resistant bacteria in our water bodies and oceans. To face these challenges in a comprehensive way and to develop multidisciplinary and practical solutions for the provision of safe drinking water and healthy aquatic environments, this Joint Transnational Call (JTC) aims to make the research communities in the freshwater, marine and the health sectors work together and create synergies for joint approaches.

Read more on:

<https://www.ipiamr.eu/11th-call/>

Types of action: Joint Programming Initiatives (Water, Oceans and Antimicrobial Resistance)

Opening date: 17 February 2020

Deadline:

- 18 May 2020 (pre-proposals)
- August 2020 (full proposals)



★ ERA-NET BIO-BASED REPLACEMENT PRODUCTS, TECHNOLOGIES AND PROCESSES **Open for submission**

Horizon 2020 - Joint Call for Proposals

Topics: Feedstocks; Industrial processes, industrial translation and social integration

Call identifier: ERA CoBioTech 3rd Call

Research projects are expected to facilitate the replacement of a specific product, technology or process which involves either:

- fossil-based or other unsustainable feedstocks (e.g high ILUC and food/feed crops) or
- unsustainable industrial processes, such as intensive production methods (e.g. involving carbon-intensive energy consumption and/or transportation).

The anticipated outputs are expected to fall within the range of commodity chemicals, intermediates and finished products/consumer goods. These can include, but are not limited to, biobased materials, biomedical products, flavours/fragrances, food/feed ingredients, pharmaceuticals, biofuels, platform chemicals, pulp/paper products, textiles, upstream and downstream design, scale-up of biotechnological processes, systems approaches to bioprocesses and process development and/or gas fermentation.

At the moment, Italy is not included in the preliminary list of funding organizations.

Read more on:

<https://www.submission-cobiotech.eu/call3>

Types of action: collaborative research, development and innovation

Opening date: 18 March 2020

Deadline: 30 June 2020 13:00:00



★ PRIMA 2020 CALL **Open for submission**

Horizon 2020 - PRIMA programme

Topics: Water management; Farming system; Agri-food value chain

Call identifier: PRIMA 2020 Call

PRIMA Programme activities will be implemented as follow:

- Section 1: Actions and activities organised, managed and funded by PRIMA-IS (PRIMA Implementation Structure)
- Section 2: Activities selected following transnational open and competitive calls for proposals organised by PRIMA-IS and funded by the national funding bodies of PS (Participating States)
- Section 3: Activities organised, managed and funded by the PS.

Thematic Areas and sub-topics are:

- Thematic Area 1 Water management:
 - Section 1, Topic 1.1.1-2020 (IA) Implementing sustainable, integrated management of water resources in the Mediterranean, under climate change conditions
 - Section 2, Topic 2.1.1 (RIA) Low cost, lean solutions for enhancing irrigation efficiency of small-scale farms
- Thematic Area 2 - Farming systems:
 - Section 1, Topic 1.2.1 Genetic conservation and animal feeds
 - Topic 1.2.1 (RIA) Conservation and valorisation of local Animal Genetic Resources

Types of action: RIA Research and Innovation action, IA Innovation action

Opening date: 11 February 2020

Deadline:

- Section 1:
 - 06 May 2020 17:00:00 (Pre-proposals)
 - 02 September 2020 17:00:00 (Full proposals)
- Section 2:
 - 13 May 2020 17:00:00 (Pre-proposals)
 - 16 September 2020 17:00:00 (Full proposals)



- Topic 1.2.1 (IA) Alternative animal feeds
- Section 2, Topic 2.2.1 (RIA) Re-design the agro-livelihood systems to ensure resilience
- Thematic Area 3 - Agrofood chain:
 - Section 1, Topic 1.3.1 (IA) Valorising the health benefits of Traditional Mediterranean food products
 - Section 2, Topic 2.3.1 (RIA) New optimization models of the agro food supply chain system to fair price for consumers and reasonable profit share for farmers
- Nexus theme 4:
 - Section 1, Topic 1.4.1 (IA) Demonstrating benefits of the Water-Ecosystem-Food Nexus approach in delivering optimal economic development, achieving high level of environmental protection and ensuring fair access to natural resources

Read more on:

<http://prima-med.org/calls-for-proposals/>



European Cooperation in the field of Scientific and Technical Research

★ COST OPEN CALL FOR PROPOSALS **Open for submission**

Topics: all scientific disciplines

COST (European Cooperation in Science and Technology) is a pan-European intergovernmental framework dedicated to networking activities for European researchers to jointly develop their own ideas and new initiatives across all scientific disciplines through trans-European coordination of nationally funded research activities. COST has been contributing to closing the gap between science, policy makers and society throughout Europe and beyond since its creation in 1971.

Read more on:

<https://www.cost.eu/funding/how-to-get-funding/open-call/>

COST (European Cooperation in Science and Technology)

Types of action: trans-European cooperation

Deadline: 29 October 2020 12:00:00



European Commission

➔ REGIOSTARS AWARDS 2020 **Open for submission**

Topics: Industrial transition for a Smart Europe; Circular economy for a green Europe; Skills & Education for a digital Europe; Citizens engagement for cohesive European cities; Youth empowerment for cooperation across borders

Call identifier: REGIOSTARS 2020

The European Commission hands out annual REGIOSTARS awards to EU-funded projects which demonstrate excellence and new approaches in regional development, with the goal of inspiring other regions and project managers across Europe. The awards scheme encompasses five different thematic topics that change every year. An independent jury of high-level academics will assess the submitted project applications and crown the winners. In addition, the public will decide on its own winner through a public on-line vote and award the Public choice award to one of the projects. The winners in the five categories, and the winner of the public choice, will receive their well-deserved prize at the festive REGIOSTARS awards ceremony, to take place in Brussels in October 2020.

The winners of the five categories will also get a paid media partnership worth EUR 5 000.

Read more on:

<https://regiostarsawards.eu/>

European Commission

Types of action: awards to EU funded projects

Opening date: 02 March 2020

Deadline: 09 May 2020 23:59:59



→ LIFE PROGRAMME CALL FOR PROPOSALS

Topics: Nature and biodiversity; Environment and resource efficiency; Environmental governance and information; Climate change mitigation; Climate change adaptation; Climate governance and information

Call identifier: 2020 LIFE calls for proposals

The LIFE programme is divided into two sub-programmes, one for environment (representing 75% of the overall financial envelope) and one for climate action (representing 25% of the envelope).

Read more on:

<https://ec.europa.eu/easme/en/section/life/calls-proposals>

EVENT:

EU LIFE information and networking day

<https://ec.europa.eu/easme/en/eu-life-information-and-networking-day>

LIFE Programme - European Programme for the Environment and Climate Action

Types of action: Traditional projects; Integrated projects; Preparatory projects; Technical assistance

Opening date: 02 April 2020

Deadline:

- Environment sub-programme:
 - Environment and resource efficiency traditional projects: 14 July 2020
 - Nature and biodiversity traditional projects: 16 July 2020
 - Environmental governance and information traditional projects: 16 July 2020
 - Integrated projects under the sub-programme for environment: 06 October 2020
 - Technical assistance projects under the sub-programme for environment: 16 July 2020
- Climate action sub-programme:
 - Climate change mitigation traditional projects: 06 October 2020
 - Climate change adaptation traditional projects: 06 October 2020
 - Climate governance and information traditional projects: 06 October 2020
 - Integrated projects under the sub-programme for climate action: 06 October 2020
 - Technical assistance projects under the sub-programme for climate action: 16 July 2020





Enterprise Europe Network

➔ CARE & INDUSTRY TOGETHER AGAINST CORONA **Open for submission**

Enterprise Europe Network

Topics: Consumer Goods (Prevention/Diagnostics/Treatment/Rehabilitation); Diagnostics (Biomedical/Medical Technology); Emergency Medicine/Rescue Equipment; Hospital & Care Equipment; Hygiene, Sterilisation, Disinfection; Imaging; Information Technology; Communication Technology; Intensive Medicine, Anaesthesiology, Respiration; Laboratory Technology; Physiotherapy; Therapy & Physical Medicine; Gaming Technology; Leisure; Corona Measures & Support; Others

La rete europea per il trasferimento tecnologico, Enterprise Europe Network ha avviato un'iniziativa dedicata all'emergenza del Covid-19: si tratta di una piattaforma aperta all'incontro fra domanda e offerta di prodotti e soluzioni innovative, e alla condivisione delle conoscenze e prassi in questo periodo emergenziale. La piattaforma "Care & Industry together against CORONA" è aperta a tutti gli operatori del settore che possono ritenere utile partecipare: strutture ospedaliere, imprese, operatori dell'emergenza, centri di ricerca pubblici o privati, università e tutti i soggetti interessati. Si tratta anche di un'occasione nuova per trovare partner con cui costruire proposte progettuali e presentare idee per il finanziamento sui bandi internazionali aperti sul tema del Coronavirus. Le aree tematiche sono tutte quelle potenzialmente legate all'emergenza in corso, dai dispositivi di protezione e cura alla diagnostica e monitoraggio, e ancora: tecnologie per la gestione del paziente, medicina d'emergenza, apparecchiature e strumenti di laboratorio, tecnologie dell'informazione e della comunicazione, imaging, ecc.

Read more on:

<https://care-industry-together-againstcorona.b2match.io>

Types of action: support in the search and identification of potential partner(s)

Deadline: 31 December 2020



PRACE - Partnership for Advanced Computing in Europe

➔ PRACE SUPPORT TO MITIGATE IMPACT OF COVID-19 PANDEMIC **Open for submission**

Partnership For Advanced Computing in Europe ("PRACE"), international non-profit association

Topics: Biomolecular research to understand the mechanisms of the virus infection; Bioinformatics research to understand mutations, evolution, etc.; Bio-simulations to develop therapeutics and/or vaccines; Epidemiologic analysis to understand and forecast the spread of the disease; Other analyses to understand and mitigate the impact of the pandemic

Types of action: Fast Track Call for Proposals

Deadline: to be defined

PRACE - Partnership for Advanced Computing in Europe ha aperto un bando per la ricerca di soluzioni che contribuiscano a mitigare l'impatto dell'emergenza Covid-19.

Il bando è rivolto a ricercatori appartenenti a organismi di ricerca, università e industrie con sede nell'Unione Europea. Le candidature verranno valutate nell'arco di una settimana e i progetti selezionati dovranno iniziare il prima possibile.

Read more on:

<https://prace-ri.eu/prace-support-to-mitigate-impact-of-covid-19-pandemic/>



Ministero per l'Innovazione tecnologica e la Digitalizzazione, Ministero per lo Sviluppo Economico, Ministero per l'Università e la Ricerca, AgID

➔ INNOVA PER L'ITALIA **Open for submission**

Topics: 1) Dispositivi di protezione individuale e produzione dei sistemi complessi dei respiratori per il trattamento delle sindromi respiratorie; 2) Kit o tecnologie innovative che facilitino la diagnosi del Covid-19 in termini di tamponi e elementi accessori e strumenti per la diagnosi facilitata e veloce; 3) Tecnologie e strumenti che consentano o facilitino il monitoraggio, la prevenzione, il trattamento e il controllo del Covid-19

Innova per l'Italia è un invito ad aziende, università, enti e centri di ricerca pubblici e privati, associazioni, cooperative, consorzi, fondazioni e istituti che, attraverso le proprie tecnologie, possono fornire un contributo nell'ambito dei dispositivi per la prevenzione, la diagnostica e il monitoraggio per il contenimento e il contrasto del diffondersi del Coronavirus (SARS-CoV-2) sull'intero territorio nazionale.

Le proposte verranno valutate dalla struttura del Commissario Straordinario, che deciderà se attivarsi per i passi successivi mettendosi in contatto con i proponenti, in considerazione della tipologia di proposta e urgenza emergenziale, in particolare quelle relative ai dispositivi di protezione individuale e respiratori che rivestono assoluta priorità. Tale processo si muoverà in conformità con le evidenze scientifiche e con le necessità di certificazione nel rispetto degli standard necessari e delle linee guida dell'Organizzazione Mondiale della Sanità.

Per alcune tipologie di proposte, le aziende che verranno contattate potrebbero necessitare di certificare le proprie attività e produzioni, tramite opportuna rete di soggetti (ad esempio Università, Enti di Ricerca). In particolare, per i punti 1 e 2, in relazione al prevalente impatto sulla produzione industriale, le Università, gli Enti e Centri di Ricerca, per la loro rilevante funzione sociale, scientifica, tecnologica e di supporto territoriale, potranno supportare le attività di attestazione dei requisiti dei prodotti sviluppati dalla aziende. Le Università, gli Enti e Centri di Ricerca disponibili saranno inclusi in un elenco che sarà successivamente condiviso per dare supporto alle aziende rispondenti. La rete di soggetti partecipanti potrà essere successivamente estesa in relazione alle necessità. La Conferenza Rettori Università Italiane e gli Enti di ricerca contribuiscono al coordinamento delle attività.

Read more on:

<https://innovaperitalia.agid.gov.it/home/>

MID - Ministero per l'innovazione tecnologica e la digitalizzazione, il MiSE - Ministero dello Sviluppo Economico e il MUR - Ministero dell'Università e della Ricerca, con il supporto di AgID - Agenzia per l'Italia Digitale e Invitalia

Types of action: sovvenzioni dirette



Ministry of Education, University and Research-MIUR

AVVISO PUBBLICO PER L'EROGAZIONE DI FINANZIAMENTI NELL'AMBITO DEL FONDO DI FONDI DEL PROGRAMMA OPERATIVO NAZIONALE RICERCA E INNOVAZIONE 2014-2020 (PON R&I) **Open for submission**

Topics: Biotecnologie Industriali; Fotonica; Materiali Avanzati; Micro/Nanoelettronica; Nanotecnologie; Sistemi manifatturieri avanzati.

In attuazione del Programma Operativo Nazionale (PON) Ricerca e Innovazione 2014-2020 e allo scopo di incrementare gli investimenti in ricerca e sviluppo fornendo adeguati strumenti finanziari, il Ministero dell'Istruzione, dell'Università e della Ricerca (MIUR) ha creato un "Fondo di fondi" di rilevanza nazionale per la ricerca e l'innovazione gestito dalla Banca europea per gli investimenti (BEI). Gli investimenti che i Fondi Ricerca e Innovazione potranno finanziare comprendono attività di ricerca industriale e sviluppo sperimentale in linea con i criteri di selezione del PON Ricerca e Innovazione e promuovono lo sviluppo e l'utilizzo delle tecnologie abilitanti fondamentali (Key Enabling Technologies - KETs) per le aree tematiche della Strategia Nazionale di Specializzazione Intelligente. La strategia di investimento del Fondo prevede anche la possibilità di realizzare una piattaforma nazionale per la ricerca e l'innovazione con eventuali apporti di risorse proprie da parte della BEI, di altri programmi operativi nazionali e regionali, e/o di altri intermediari finanziari nazionali e regionali. L'attuazione dello strumento finanziario interessa innanzitutto le otto regioni target del PON (Basilicata, Calabria, Campania, Puglia, Sicilia, Abruzzo, Molise e Sardegna), ma anche le

PON Ricerca e Innovazione 2014-2020

Types of action: Investimenti in R&I

Deadline: 31 December 2022 (Bando a sportello)





UNIVERSITÀ
ITALO
FRANCESE

Ministero dell'Istruzione, dell'Università e della Ricerca (MIUR) e Università Italo Francese

➔ BANDO PHC GALILEO 2021 **Open for submission**

Topics: Mari e Oceani; Scienze spaziali e aeronautiche; Disuguaglianze, vulnerabilità, povertà: pratiche e rappresentazioni economiche, politiche, sociali e culturali; Medicina 4.0

L'obiettivo del programma è quello di stimolare lo sviluppo di rapporti di cooperazione scientifica e tecnologica di eccellenza tra istituti di ricerca dei due Paesi, favorendo in particolare nuove collaborazioni attraverso scambi tra gruppi di giovani ricercatori. L'offerta è diretta a gruppi di ricercatori e studiosi in attività presso istituzioni universitarie e/od organismi di ricerca, italiani e francesi.

Read more on:

<https://www.universite-franco-italienne.org/menu-principal/bandi/programma-galileo/bando-2021/>

Programma comune di collaborazione scientifica italo-francese

Types of action: progetti di cooperazione scientifica

Opening date: 16 marzo 2020

Deadline: 14 maggio 2020
12:00:00



Regione Calabria

INGEGNO

Topics: Agroalimentare, Edilizia Sostenibile, Turismo e Cultura, Logistica, ICT e Terziario innovativo, Smart Manufacturing, Ambiente e Rischi Naturali, Scienze della Vita.

È stato pubblicato sul Bollettino Ufficiale della Regione Calabria n. 126 del 15/11/2019, il bando che dà attuazione all'Azione 1.1.5 del POR Calabria FESR FSE 14/20 - Sostegno all'avanzamento tecnologico delle imprese attraverso il finanziamento di linee pilota e azioni di validazione precoce di prodotti e di dimostrazione su larga scala. Un percorso partito dalla presentazione di un risultato della ricerca scientifica e inserito in un format di affiancamento alla valorizzazione industriale di prodotti e di processi innovativi. L'importante iniziativa, infatti, si è sviluppata per fasi: raccolta dei risultati della ricerca in uno stadio di sviluppo compreso tra TRL4 e TRL7 (Fase 1); valutazione della coerenza con la S3 Calabria (Fase 2); presentazione dei risultati della ricerca nella vetrina pubblica di INGEGNO rivolta alle aziende (Fase 3); infine, gestione dei rapporti di collaborazione con le imprese interessate ad avviare progetti di convalida industriale (Fase 4).

Candidarsi è semplice: le aziende calabresi, a partire dalle 12:00 del 16 dicembre, potranno presentare Domanda di Accesso utilizzando la modulistica scaricabile dal sito web Calabria Europa secondo due possibili percorsi. Il primo: l'azienda sceglie un risultato della ricerca dalla vetrina INGEGNO e avvia un percorso di conoscenza fra imprenditore e gruppo di ricerca, con un'eventuale erogazione di fondi in regime di de minimis (FASE I) e, solo dopo aver concluso positivamente tale percorso, i due soggetti, in rapporto di collaborazione effettiva, decidono se candidare alla successiva fase. Secondo percorso possibile: l'azienda e il gruppo di ricerca, scelto dalla vetrina INGEGNO, candidano direttamente a FASE II il proprio progetto di convalida industriale da realizzare entro 18 mesi.

Read more on:

<http://calabriaeuropa.regione.calabria.it/website/view/news/1125/index.html>

POR CALABRIA FESR-FSE 2014-2020

Opening date: 16 December
12:00:00

Deadline: Bando a sportello



★ **BANDI CARIPLO 2020 Open for submission**

Topics:

- Ambiente:
 - Plastic challenge
 - Coltivare Valore
- Arte e cultura:
 - Cultura di qualità
- Ricerca scientifica:
 - Attrattività e competitività su strumenti dello European Research Council
 - Bando Ricerca medica condotta da giovani ricercatori
 - Policy IPR, Open Access, Linee Guida per Comunicazione
- Servizi alla persona:
 - Bando Housing Sociale per Persone Fragili
 - Bando riservato Welfare in Azione: Pratiche di Comunità
 - Bando riservato Welfare in Azione: Call WIA al 2.0
 - Bando Housing Mi.Mo.5.
 - Coltivare Valore

La Fondazione Cariplo ha pubblicato ufficialmente i bandi 2020 per assegnare contributi a fondo perduto per la realizzazione, da parte di enti senza scopo di lucro, di progetti e iniziative. In totale solo 10 i bandi promossi, suddivisi in 4 aree tematiche (Ambiente - Arte e Cultura - Ricerca scientifica - Servizi alla persona).

La Fondazione non concede, direttamente o indirettamente, contributi, erogazioni o sovvenzioni di alcun genere a enti con fini di lucro o imprese di qualsiasi natura. Inoltre, nel bando si richiede che l'organizzazione capofila abbia la sede operativa per lo svolgimento del progetto nell'area di riferimento della Fondazione (Lombardia e province di Novara e Verbania). Tale requisito non riguarda gli eventuali partner.

Read more on:

<https://www.fondazionecariplo.it/it/bandi/index.html>

Fondazione Cariplo

Types of action: Contributo nella spesa / Cofinanziamento

Deadlines:

- Ambiente:
 - Plastic challenge: 20 luglio 2020
 - Coltivare Valore: I Fase 16 aprile 2020; II Fase 24 settembre 2020
 - Strategia Clima: 06 luglio 2020
- Arte e cultura:
 - Cultura di qualità: 15 aprile 2020 ore 16.59; 30 settembre 2020 ore 16.59
- Ricerca scientifica:
 - Misura per contrastare l'emergenza Coronavirus e altre emergenze virali del futuro: dal 6 al 20 aprile 2020
 - Attrattività e competitività su strumenti dello European Research Council: Sottomisura Attrattività: 22 settembre 2020; Sottomisura Rafforzamento: 12 ottobre 2020
 - Bando Ricerca medica condotta da giovani ricercatori: I fase 7 aprile 2020; II fase 9 settembre 2020
 - Bando Economia Circolare: 19 maggio 2020
 - Bando Ricerca Sociale, Scienza Tecnologia e Società: 10 giugno 2020
- Servizi alla persona:
 - Bando Housing Sociale per Persone Fragili: Bando senza scadenza
 - Bando riservato Welfare in Azione - Pratiche di Comunità: 16 luglio 2020
 - Coltivare Valore: I Fase 16 aprile 2020; II Fase 24 settembre 2020



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**Consiglio Nazionale delle Ricerche - Istituto per la Tecnologia delle Membrane
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