

EU-INDIA R&I Cooperation Horizon Europe [2024-25]



# **Opportunities for R&D Collaboration & Funding**

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> Ashoka University 12 September 2024



European Commission

#### Content

#### HE Co-funded calls & Open Calls

- Calls earmarked for co-funding by GoI. & Deadlines and other calls
- Where to find call text & India co-funding modalities?
- Participation & EU funding to India
- Consortium India Regulatory & Ethical Considerations & IPR
- Proposal Preparation & Submission
- Evaluation & Timeline
- Partner search & websites

#### Horizon Europe – Structure: €95.5 billion.



#### Widening Participation and Strengthening the European Research Area

- a) Widening Participation and Spreading Excellence
- b) Reforming and Enhancing the European R&I System



# **EU Framework Programmes: Horizon Europe**

- A unique international R&I programme with scale and scope
- Truly multilateral and multidisciplinary
- Targeting actions with key partners (Region/ Multilateral fora)
- **Top down approach** predefined problems (TRL 3 onwards);
- All funding on **<u>competitive basis</u>** though calls of proposals;
- Independent Evaluation: external experts (peer reviewers);
- Average success rate **15.9%**;
- **Call Information well in advance**: Work Programme (WP) publish every two years (now WP 2023-2024) and WP 2025-2027 under preparation;
- All WPs made public & +250 calls open : see Funding & Tenders Portal



# **Horizon Europe - Opportunities**

#### Open to the world

- → Open to the world, which means that participants from all over the world can participate in most calls (open by default).
- Encouraging international cooperation
  - → Focus on global challenges, cross-cutting missions, partnerships, and open science policy.
- Horizon Europe offers opportunities for:
  - → Collaborative research & innovation projects: carried out by consortia of organisations
  - → Individual researcher projects: The European Research Council (ERC) and the Marie Skłodowska-Curie actions (MSCA) offer unparalleled funding opportunities for individual researchers who want to work in Europe.

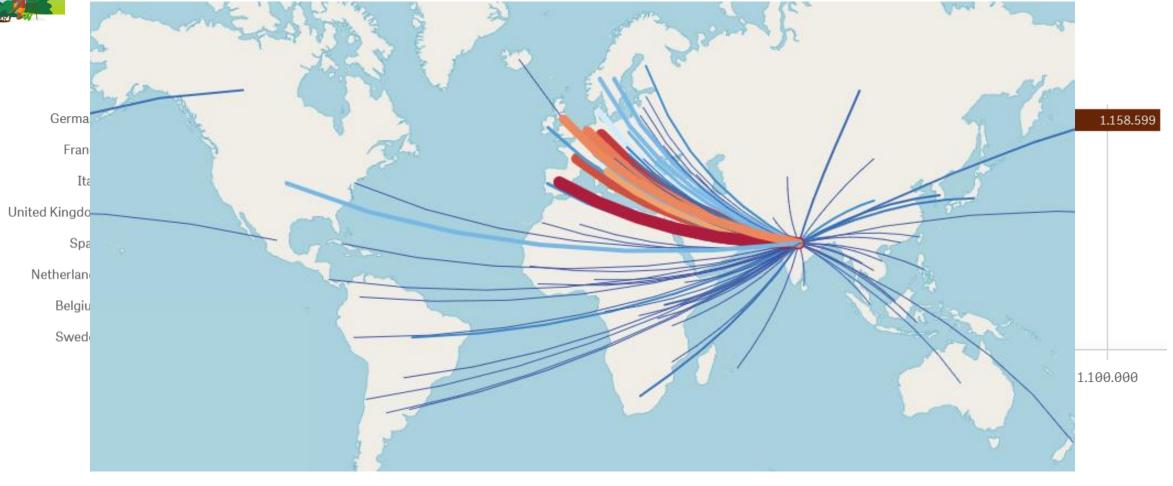


# Why apply to Horizon Europe?

- Share the latest knowledge and research results
- Reach your goals faster
- **Grow your network** → Increased visibility at EU & Global level
- Work on **global projects for global challenges**
- Access to: cutting edge technologies, infrastructure & talent
- Influence standards, regulations and research policies



# H2020/HE: EU-India Cooperation





### Where to find call text?

#### **EU-** Funding & Tenders Portal

European Commission	iders Portal
A Home Funding ▼ Procurement ▼ Projects & results	v News & events ▼ Work as an expert Guidance & documents ▼
Home > Funding > Calls for proposals	
Calls for proposals	
Calls for proposals are funding opportunities issued by the Europ private companies) to engage in activities that serve EU policies	bean Union institutions, agencies and bodies. These are direct financial contributions, known as grants, that are awarded to third-party beneficiaries (e.g., research organisations, public entities, non-governmental organisations, and s.
More details 12	
Filters	254 item(s) found
Quick search	
Select Q	Programme (Horizon Europe (HORIZON) 🛞)
2021 - 2027 🗸	European Researchers' Night and Researchers at Schools 2026-2027 HORIZON-MISCA-2025-CITIZENS-01-01   Call for proposal
Horizon Europe (HORIZON) 🗸	Opening date: 17 June 2025   Next deadline: 22 October 2025   Single-stage
Call V	Programme: Horizon Europe (HORIZON)   Type of action: HORIZON Coordination and Support Actions
Submission status 🗸	MSCA COFUND 2025
	HORIZON-MSCA-2025-COFUND-01-01   Call for proposal
Forthcoming 31	Opening date: 23 January 2025   Next deadline: 24 June 2025   Single-stage
Open for submission 223     Closed	Programme: Horizon Europe (HORIZON)   Type of action: HORIZON TMA MSCA Cofund Doctoral programme
	Teaming for Excellence
	HORIZON-WIDERA-2025-ACCESS-01-01-two-stage   Call for proposal
	Opening date: 03 December 2024   Next deadline: 10 April 2025   Two-stage
	Programme: Horizon Europe (HORIZON)   Type of action: HORIZON Coordination and Support Actions
	MSCA Staff Exchanges 2024
	HORIZON-MISCA-2024-SE-01-01   Call for proposal Opening date: 19 September 2024   Next deadline: 05 February 2025   Single-stage
	Programme: Horizon Europe (HORIZON)   Type of action: HORIZON TMA MSCA Staff Exchanges



### **Basic Eligibility Condition - Horizon Europe Proposal**

**Collaborative projects - Consortia must involve :** 

- At least **THREE** organisations
- From **THREE** different EU Member States (MS)/Associated Countries (AC).
  - at least one organisation should be established in a MS; and
  - at least two other independent legal entities, each established in different Member States (MS) or Associated Countries (AC).
- In addition, entities from other countries (e.g. India) could be included

# Who can participate?

#### **Horizon Europe:**

- 'By-default' open to almost all countries;
- Any legal entity i.e company, big or small/SME/startups, research organisations, universities, non-governmental organisations, regardless of their place of residence or establishment in "Europe or Non-European countries" – researchers, NGO. Public or private;

#### India:

- Central/State Government supported or recognized (Public or Private) academic and/or research institution(s);
- National/State funded R&D Labs;
- Scientific/R&D performing Indian industry may participate voluntarily (own funding);

# Who is eligible for HE funding?



- Member States (MS) including their outermost regions -27
- The Overseas Countries and Territories (OCTs) linked to the MS.



#### **NON-EU COUNTRIES**

- Countries associated to Horizon Europe (AC) – (currently 19)
- 120 Low and middle income countries: See <u>HE Programme</u> <u>Guide</u>....
- Other countries
- (not automatically eligible for EU funding, except if stated in call text or considered participation essential by EC/funding body)



#### **SPECIFIC CASES**

- Affiliated entities established in countries eligible for funding.
- EU bodies
- International organizations (IO):
- International European research organisations are eligible for funding.
- Other IOs (not automatically eligible for EU funding, only when announced in the call or exceptionally if their participation is essential)

Funding of European partners is as per Horizon Europe rules and type of action [RIA & IA]

see HE programme guide

# Non-European Countries not automatically funded Exceptional funding / Co-funding / own funding

#### **NON-EU COUNTRIES**

not automatically eligible for EU funding

- Industrial & Emerging Economies countries
- (e.g. US, CA, AU, NZ, JP, KOR, CN, India, BR, MX etc.)
- Associated Partners

INTERNATIONAL ORGANISATIONS

not automatically eligible for EU funding

• UN, UNESCO, WHO etc.

**Other IOs** (only when announced in the call or exceptionally if their participation is **essential**)

#### Exceptional funding

Participation deemed essential by the EC (outstanding expertise, access to research infrastructure/data etc.)

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Co-Funding Bilateral agreement between EU and Third Country

. . . . . . . . . .

#### Specific provision mention in the call text for TC funding



## India Participation & funding in non-earmarked HE calls

#### **Own funding**

- Legal entities from-non associated countries to HE (e.g. India) may in principle **not receive funding**.
- Normally, they bear their **own costs** <u>Beneficiary or Associated Partner</u>.

#### **Exceptional Funding**

Legal entities from non-associated **may receive funding** from the EU Commission:

- 1. If the non-EU country (e.g. India) is **explicitly mentioned** in the work programme
- 2. If the EU Commission considers participation of the relevant legal entity as **Deemed essential** for implementing the action in a proposal and approved by the granting authority!

Example in view of their:

- outstanding competence/expertise
- access to particular research infrastructures
- access to particular geographical environments
- access to particular data

Funding as **per Horizon Europe rules** and type of action [RIA & IA] see HE programme guide

### **Consortia Formation**

- At least <u>3 legal organisations</u> from <u>3 different EU Member States and/or Associated</u> Countries (at least 1 from EU MS);
- <u>Additional legal organisations</u> depending on project requirement from Europe, India, and other non-European countries could be included;
- Partners: <u>multidisciplinary</u>, cross-sectoral & cross-border participation encouraged;
- Gender balance: female participation highly encouraged;
- One Project Coordinator from EU consortium to decide;
- One lead scientific coordinator from India.



### Horizon Europe : EU Member States & Associated Countries

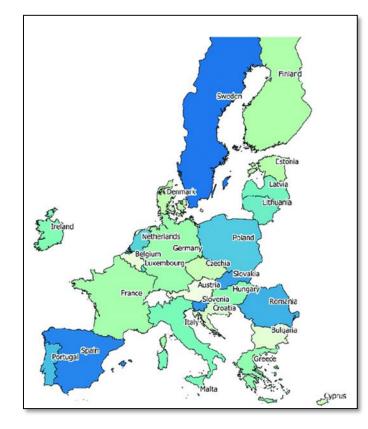
#### 27 EU Member States (MS)

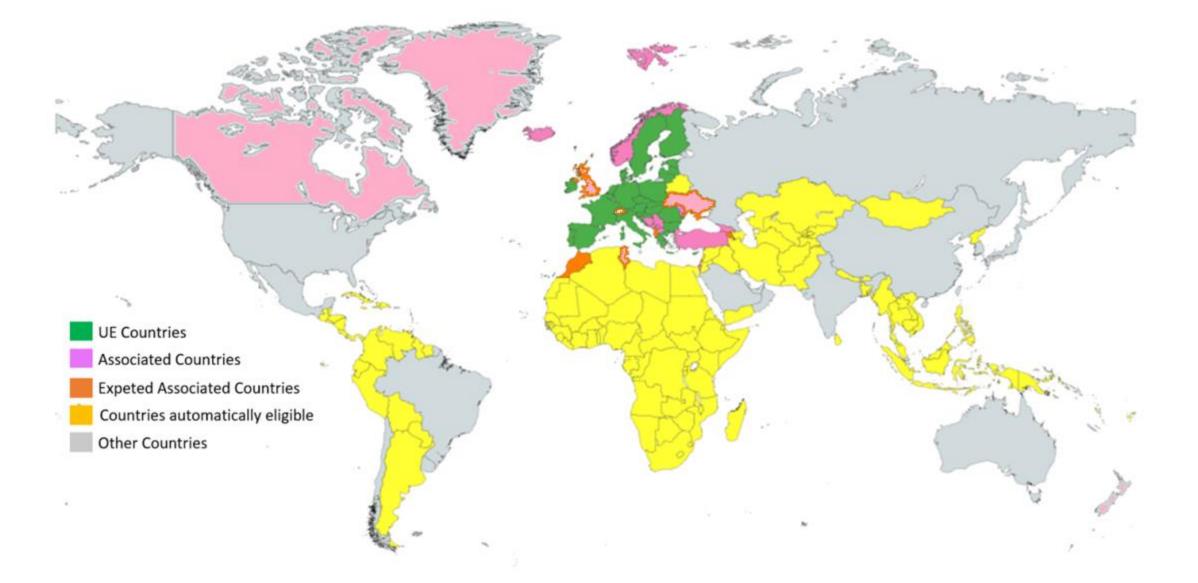
Austria, Belgium, Bulgaria, Croatia, Republic of Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, The Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain and Sweden

#### **19 Horizon Europe Associated Countries (AC)\***

Albania, Armenia, Bosnia and Herzegovina, **Canada** (Pillar II 'Global Challenges), Faroe Islands, Georgia, Iceland, **Israel**, Kosovo, Moldova, Montenegro, **New Zealand** (associated to HE Pillar II 'Global Challenges), North Macedonia, **Norway**, Serbia, Tunisia, Türkiye, Ukraine and **United Kingdom** (on 1 January 2024, the UK becomes an associated country, except EIC)

See updates <u>https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/common/quidance/list-3rd-country-participation horizon-euratom en.pdf</u> \*updated - HE association agreements status as of 11.07.2024







### Gol Co-Funded Calls & deadlines 2024

Торіс	Action	Opening & Closing
ARTIFICIAL INTELLIGENCE HORIZON-CL4-2024-HUMAN-03-02: Explainable and Robust AI (AI Data and Robotics Partnership) – DST cofunding → Budget: EUR 15 Mn (7.5 Mn per project) → TRL start at TRL 2-3 and achieve TRL 4-5	RIA	Opening: 23 April 2024 Deadline: 18 September 2024
<ul> <li>BIOFUELS</li> <li>HORIZON-CL5-2024-D3-02-03: Development of smart concepts of integrated energy driven bio-refineries for co-production of advanced biofuels, bio-chemicals and biomaterials - DBT cofunding</li> <li>→ Budget: EUR 7 Mn (3.5 Mn per project)</li> <li>→ TRL Activities are expected to achieve TRL 5</li> </ul>	RIA	Opening: 17 September 2024 Deadline: 21 January 2025

# Where to find Gol. co-funding guidelines?

#### DST







ANNOUNCEMENT INDIA-EU COOPERATION ON RESEARCH & INNOVATION (R&I)

DST ANNOUNCES CO-FUNDING PARTNERSHIP UNDER THE EU FRAMEWORK PROGRAMME ON R&I 'HORIZON EUROPE' CALLS 2023-2024

Collaboration in Science, Technology and Innovation (STI) plays an increasingly important role in the EU-India Strategic Partnership. In line with the EU-India



লীৰ ট্ৰাইাথিকী বিশাস **Department of Biotechnology** Ministry of Science & Technology Government of India



ANNOUNCEMENT INDIA-EU COOPERATION ON RESEARCH & INNOVATION (R&I)

B

DBT ANNOUNCES CO-FUNDING PARTNERSHIP UNDER THE EU FRAMEWORK PROGRAMME ON R&I 'HORIZON EUROPE' CALLS 2023-2024

Collaboration in Science, Technology and Innovation (STI) plays an increasingly important role in the EU-India Strategic Partnership. In line with the EU-India

**MoES** 



Ministry of Earth Sciences Government of India



EUROPEAN UNION

Cooperation on Climate Change and Polar Research between Ministry of Earth Sciences (MoES) and the European Union (EU) under the R&I programme 'HORIZON EUROPE' (2023-2024)

Researchers and innovators from universities and research organisations from India can team up with European partners in the calls for proposals published by the European Commission



### **General Gol. co-funding conditions?**

- Indian entities to comply terms & conditions of respective funding agency (DST/DBT/MoES) ! - see web notice;
- Proposal not submitted to both funding portals/agencies will be disqualified;
- Co-funding subject to **positive evaluation** by respective Indian funding agencies;
- Indian entities **not to sign the EC Grant Agreement**!
- Duration: up to 3-4 years;

## What is funded by Gol. under co-funding?

(limited to GoI earmarked calls - see list (click here)

- 100% funding (Grant-in-aid) → Public or Private academic and/or research institution(s), National/State funded R&D Labs
- Eligible costs:
  - Capital expenditure (equipment's)
  - Manpower
  - Consumables
  - Travel (local and international travel)
  - Contingency
  - Overheads
  - Outsourcing
  - others (training & awareness; workshops; publications; review meetings, etc.)
- IND contribution per project:
  - DST/MoES: INR 1.5 crores/project (~EUR 160,000/project)
  - DBT: As per requirement of the project

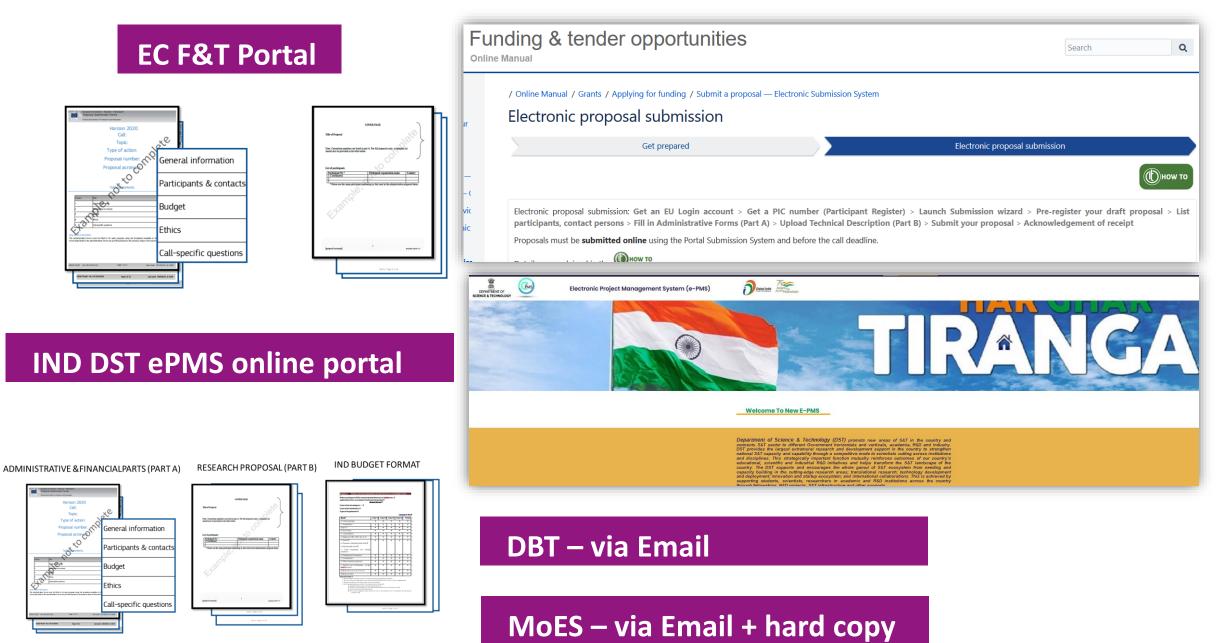


## Admissibility: general conditions of Gol.

#### **Application must be:**

- Jointly developed by EU + India + other partners in prescribed HE template (Part A & B);
- Submitted electronically to Funding & Tenders Portal electronic submission system by the call deadline (task of European Project Coordinator);
- Submitted to Gol. i.e. same proposal as submitted to Horizon Europe F&T Portal + in annex administrative & financial form required by DST/DBT/MoES;
- Submitted to DST: by lead Indian scientific coordinator/PI on DST <u>ePMS online portal</u> within 7 working days after the HE call closing date;
- Submitted to DBT via email within 7 working days after the HE call closing date;
- Submitted to MoES via email + hard copy within 7 working days after the HE call closing date;
- Complete and contain all parts and mandatory Annexes and supporting documents must be readable, accessible and printable;

### **Submission of Proposal**





# Horizon Europe Calls Open but Not Cofunded by Gol



## Health – calls 2024

Non-Communicable and Rare Diseases	Deadline
HORIZON-HLTH-2024-DISEASE-13-01: Implementation research for management of multiple long- term conditions in the context of non-communicable diseases (Global Alliance for Chronic Diseases - GACD)	26 Nov 2024
Infectious Diseases, including poverty-related and neglected diseases	Deadline
HORIZON-HLTH-2024-DISEASE-09-01: European Partnership: One Health Anti-Microbial Resistance	25 Sep 2024
HORIZON-HLTH-2024-DISEASE-12-01: European partnership for pandemic preparedness	26 Nov 2024
Innovative Health Initiative	Deadline
HORIZON-JU-IHI-2024-08-01-two-stage: A city-based approach to reducing cardiovascular mortality in Europe	10 Oct 2024
HORIZON-JU-IHI-2024-08-02-two-stage: Novel Endpoints for Osteoarthritis (OA) by applying Big Data Analytics	10 Oct 2024
HORIZON-JU-IHI-2024-08-03-two-stage: Modelling regulatory sandbox mechanisms and enabling their deployment to support breakthrough innovation	10 Oct 2024
HORIZON-JU-IHI-2024-08-04-two-stage: Patient-Centred Clinical-Study Endpoints Derived Using Digital Health Technologies	10 Oct 2024
	European Commissio

## Health – calls 2024

Cancer	Deadline
HORIZON-MISS-2024-CANCER-01-02: Support dialogue towards the development of national cancer	18 Sep 2024
data nodes	
HORIZON-MISS-2024-CANCER-01-03: Accessible and affordable tests to advance early detection of	18 Sep 2024
heritable cancers in European regions	
HORIZON-MISS-2024-CANCER-01-04: Support a pragmatic clinical trial programme by cancer	18 Sep 2024
charities	
HORIZON-MISS-2024-CANCER-01-05: Improving the understanding and management of late-effects	18 Sep 2024
in adolescents and young adults (AYA) with cancer	
HORIZON-MISS-2024-CANCER-01-06: An information portal for the European Cancer Patient Digital	18 Sep 2024
Centre	



## Advanced, Raw, and Nano Materials – calls 2024-25

Materials	Deadline
HORIZON-CL5-2024-D3-02-07: Resource Efficiency of PV in Production, Use, and Disposal	04 Feb 2025
HORIZON-EIC-2024-PATHFINDERCHALLENGES-01-03: Nature-Inspired Alternatives for Food Packaging and Films for Agriculture	16 Oct 2024
HORIZON-EIC-2024-PATHFINDERCHALLENGES-01-01: Solar-to-X Devices for the Decentralized Prosumption of Renewable Fuels, Chemicals, and Materials as Climate Change Mitigation Pathway	16 Oct 2024



## Energy calls: 2024-25

Solar	Deadline
HORIZON-CL5-2024-D3-02-01: Digital tools for CSP and solar thermal plants	04 Feb 2025
HORIZON-CL5-2024-D3-02-05: PV-integrated electric mobility applications	04 Feb 2025
HORIZON-CL5-2024-D3-02-07: Resource Efficiency of PV in Production, Use and Disposal	04 Feb 2025
HORIZON-CL5-2024-D3-02-06: Innovative, Community-Integrated PV systems	04 Feb 2025
Renewable fuel	Deadline
HORIZON-CL5-2024-D3-02-02: Development of next generation synthetic renewable fuel technologies	04 Feb 2025
HORIZON-CL5-2024-D3-02-03: Development of smart concepts of integrated energy driven bio- refineries for co-production of advanced biofuels, bio-chemicals and biomaterials	04 Feb 2025
HORIZON-CL5-2024-D3-02-13: Support to the activities of the SET Plan Key Action area Renewable fuels and bioenergy	04 Feb 2025
HORIZON-CL5-2024-D3-02-11: CCU for the production of fuels	04 Feb 2025
	Europoon



## Energy calls: 2024-25

Wind Energy	Deadline
HORIZON-CL5-2024-D3-02-04: Critical technologies for the future ocean energy farms	04 Feb 2025
HORIZON-CL5-2024-D3-02-08: Minimisation of environmental, and optimisation of socio-economic impacts in the deployment, operation and decommissioning of offshore wind farms	04 Feb 2025
HORIZON-CL5-2024-D3-02-09: Demonstrations of innovative floating wind concepts	04 Feb 2025
HORIZON-CL5-2024-D3-02-10: Market Uptake Measures of renewable energy systems	
HORIZON-CL5-2024-D3-02-12: DACCS and BECCS for CO2 removal/negative emissions	
Energy Storage	Deadline
HORIZON-CL5-2024-D2-02-01: Sustainable high-throughput production processes for stable lithium metal anodes for next generation batteries (Batt4EU Partnership)	05 Sep 2024
HORIZON-CL5-2024-D2-02-02: Post-Li-ion technologies and relevant manufacturing techniques for mobility applications (Generation 5) (Batt4EU Partnership)	05 Sep 2024
HORIZON-CL5-2024-D2-02-03: Size & weight reduction of cell and packaging of batteries system, integrating lightweight and functional materials, innovative thermal management and safe and sustainable by design approach (Batt4EU Partnership)	05 Sep 2024
HORIZON-CL5-2024-D2-02-04: Accelerated multi-physical and virtual testing for battery aging, reliability and safety evaluation (Batt4EU Partnership)	05 Sep 2024

## Food, Agriculture and Environment: Calls 2024

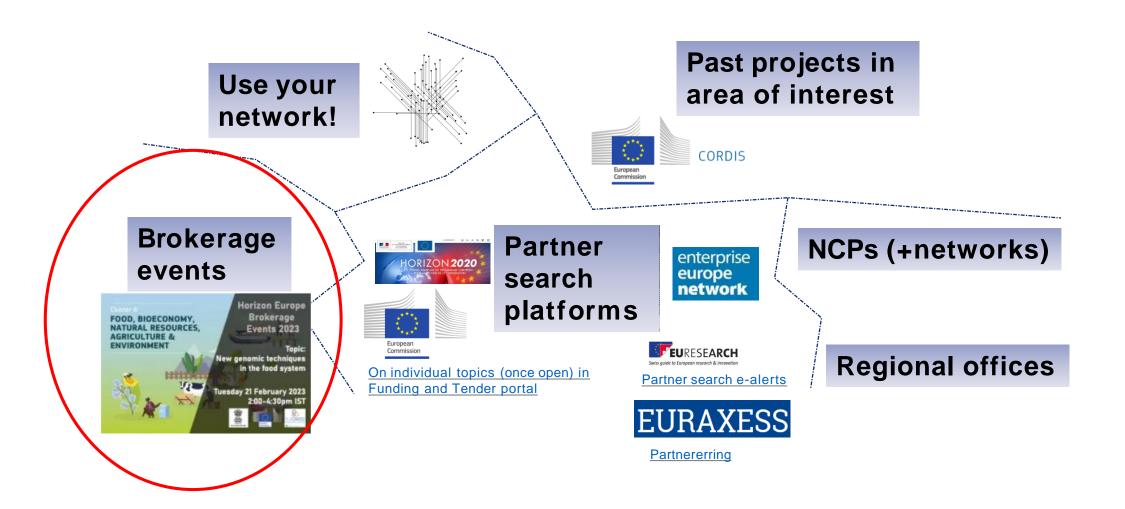
Agriculture and Environment	Deadline
HORIZON-CL6-2024-CLIMATE-02-1: New knowledge and innovations for climate-smart farming - connecting research stations	24 Sep 2024
HORIZON-CL6-2024-CLIMATE-02-3: Overcoming barriers and delivering innovative solutions to enable the green transition	24 Sep 2024
HORIZON-CL6-2024-FARM2FORK-03-1: Spotlight on plant priority pest: fall armyworm (Spodoptera frugiperda)	24 Sep 2024
HORIZON-CL6-2024-CLIMATE-02-2: Closing the research gaps on Essential Biogeochemical Ocean Variables (EOVs) in support of global assessments	24 Sep 2024



## **Biodiversity and Natural Resources – calls 2024**

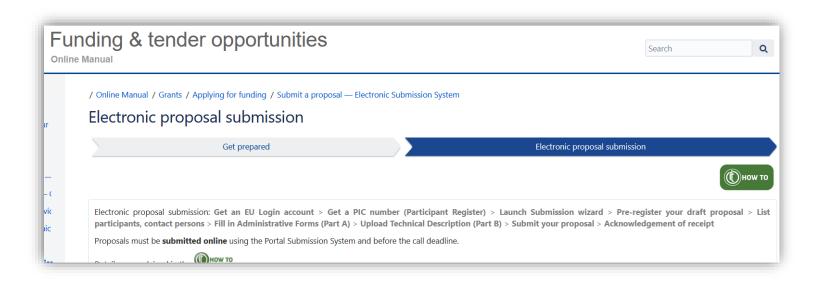
Biodiversity and Natural Resources - Soil	Deadline
HORIZON-MISS-2024-SOIL-01-01: Co-creating solutions for soil health in Living Labs	08 Oct 2024
HORIZON-MISS-2024-SOIL-01-02: Living Labs in urban areas for healthy soils	08 Oct 2024
HORIZON-MISS-2024-SOIL-01-03: Towards a dynamic monitoring system to assess status and spatiotemporal changes of soil erosion at European scale	08 Oct 2024
HORIZON-MISS-2024-SOIL-01-05: Soil health, pollinators and key ecosystem functions	08 Oct 2024
HORIZON-MISS-2024-SOIL-01-06: Harnessing the multifunctional potential of soil biodiversity for healthy cropping systems	08 Oct 2024
HORIZON-MISS-2024-SOIL-01-07: Development of high spatial-resolution monitoring approaches and geographically-explicit registry for carbon farming	08 Oct 2024
HORIZON-MISS-2024-SOIL-01-08: Managing forest peat soils	08 Oct 2024
HORIZON-MISS-2024-SOIL-01-09: Assessment of Soil Health in Africa	08 Oct 2024

## **Consortium – How to Find Partners?**



### **Submission of Proposal**

#### **EC F&T Portal**





### **Evaluation Criteria**

#### **Horizon Europe Evolution Criteria**

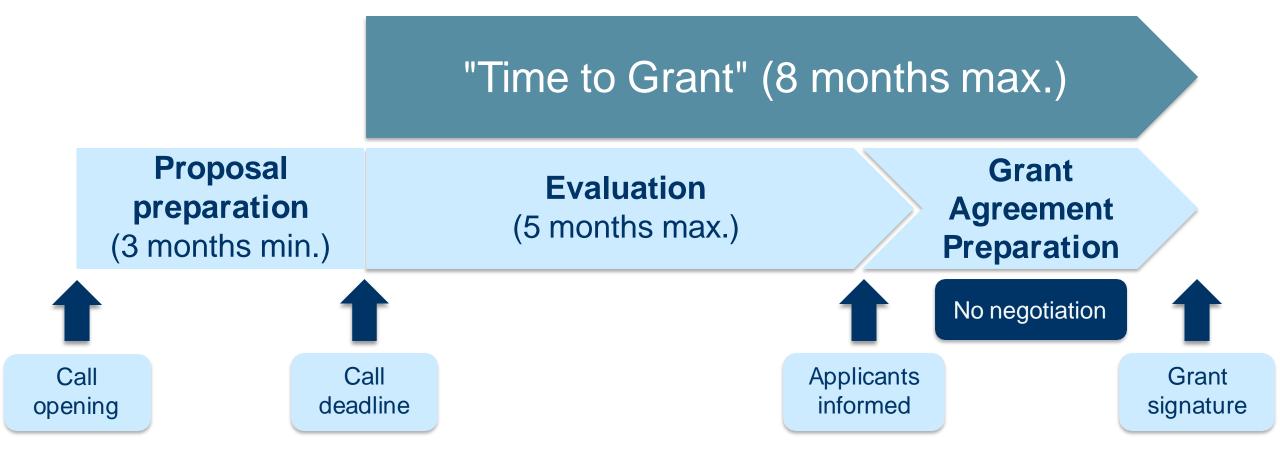
Excellence	Impact	Quality and efficiency in the implementation
<ul> <li>Clarity and pertinence of the objectives;</li> <li>Credibility of the proposed approach;</li> <li>Soundness of the concept, including trans disciplinary considerations, where relevant;</li> <li>Extent that proposed work is ambitious, has innovation potential, and is beyond the state of the art (e.g. ground breaking objectives, novel concepts and approaches).</li> </ul>	<ul> <li>The expected impacts listed in the work</li> <li>programme under the relevant topic</li> <li>Enhancing innovation capacity and integration of new knowledge;</li> <li>Strengthening the competitiveness and growth of companies by developing innovations meeting the needs of European and global markets; and by delivering such innovations to the markets;</li> <li>Any other environmental and socially important impacts;</li> <li>Effectiveness of the proposed measures to exploit and disseminate the project results</li> </ul>	including risk and innovation management.

#### **Gol. Evolution Criteria**

- Soundness, scientific quality and technological merit;
- Potential for wide application and the benefits expected to accrue from commercialization;
- Adequacy of the proposed effort;
- Capability of the R&D institution(s) in the proposed action network;
- Organizational and commercial capability of the enterprise, including its internal accruals;
- Reasonableness of the proposed cost and financing pattern;
- Measurable objectives, targets and milestones;

Proposals positively evaluated/selected by **both sides** will be considered for cofunding by the respective Indian funding agency (DST/DBT/MoES)

#### **HE Timeline**



### **Information sources**

- GoI website: <u>DST</u>, <u>DBT</u> and <u>MoES</u> guidelines for Indian applicants
- Horizon Europe Website with call details: <u>Funding & Tenders Portal</u>
- Partner Search
  - ✓ Horizon Europe: Guide to an adequate partner search
  - ✓ Express interest to specific call
  - ✓ euMatch2.0
  - ✓ <u>NCP Network</u>
  - ✓ <u>CORDIS</u>
- Information and Brokerage events: EURAXESS India website.

## **EU-India Cooperation Team**

#### EU DEL IND



**Pierrick FILLON-ASHIDA EU DEL IND** 





DST





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DBT



Dr. Sanjay Kumar Mishra DBT

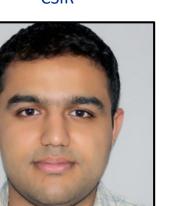


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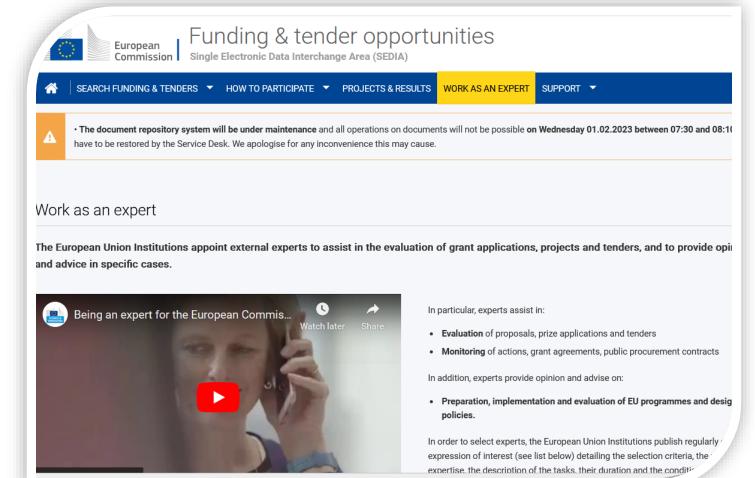
## **Upcoming Activities/Events**

Торіс	Place	Date
Horizon Europe Info Day at Ashoka University, Soni Pat	Sonipat	12 September
6th India-EU Water Forum	New Delhi	18 September
Battery recycling IND startups visits - Europe	BE, DE, NL	19-26 Sep
Battery recycling EU startups visits - India	DEL, CHN, BLR	2-9 October
European Research Day 2024	Pune	9 October
MSCA-Staff Exchanges: Brokerage & Networking Event	Virtual (EU/India)	17 October
Horizon Europe: Brokerage & networking event Bio-refinery	Virtual (EU/India)	22 October

### Work as an expert

#### Work as an expert (if not involved in project)

- For evaluation of proposals
- For project review
- Website https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/work-as-an-expert



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