Webinar "European Innovation Council - EIC: Lo strumento EIC Pathfinder"

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Horizon Europe
Vision and objectives

Horizon Europe, the ninth European Research and Innovation Framework Programme (2021-2027), is the EU's key funding instrument for research and innovation, with a budget of € 95.5 billions.

fuel EU's **scientific and technological excellence** and the strengthen the European Research Area (ERA)

Science & technology

tackle policy priorities, including **green and digital transitions** and Sustainable Development Goals

Society

boost Europe's **innovation uptake, competitiveness** and **jobs**

Economy

Horizon Europe

Vision and objectives

Horizon Europe legislation defines three types of impact tracked through **Key Impact Pathways**

1. Creating high-quality new knowledge
2. Strengthening human capital in R&I
3. Fostering diffusion of knowledge and Open Science

Scientific Impact

4. Addressing EU policy priorities & global challenges through R&I
5. Delivering benefits & impact via R&I missions
6. Strengthening the uptake of R&I in society

Societal Impact

7. Generating innovation-based growth
8. Creating more and better jobs
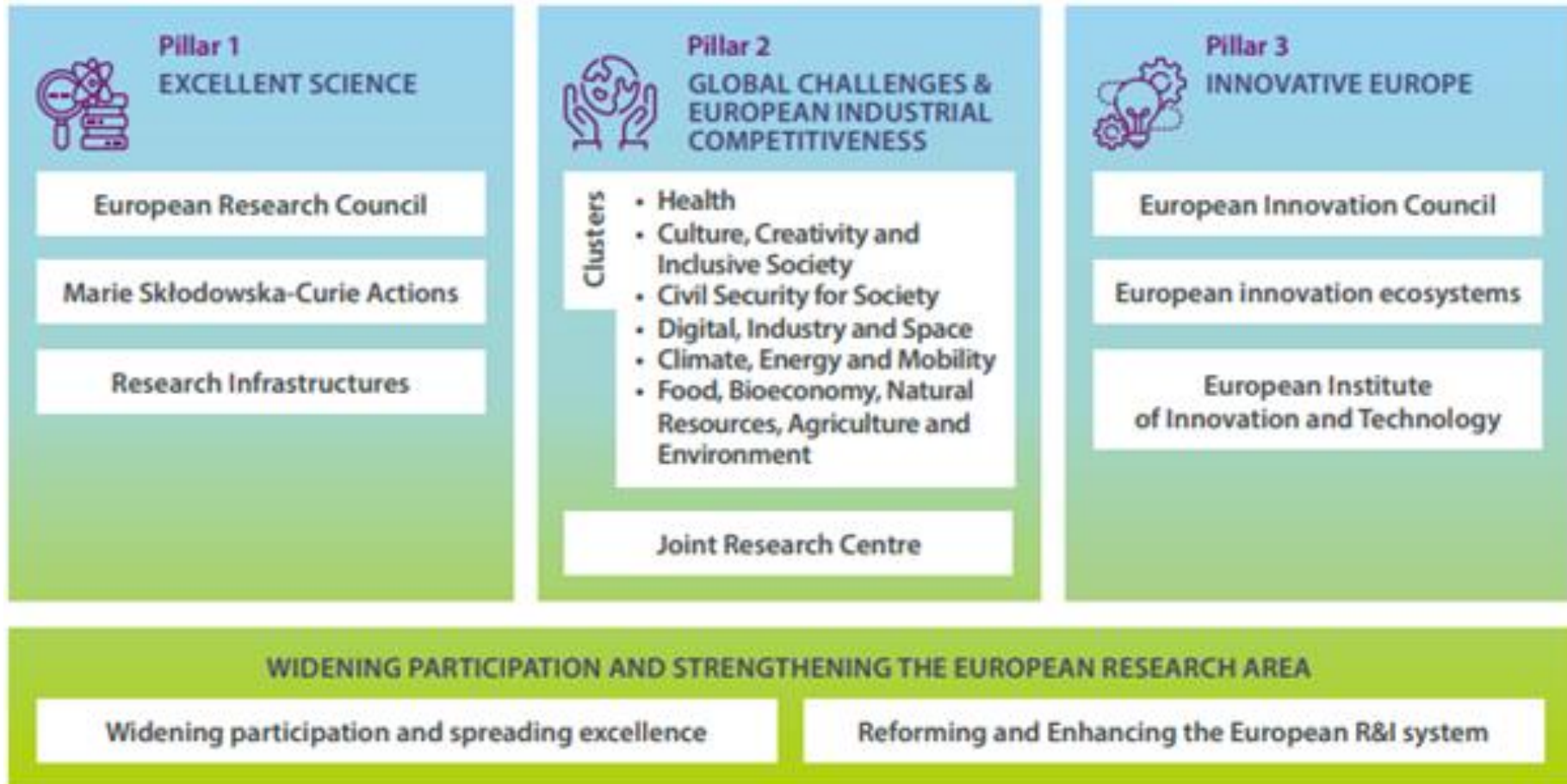9. Leveraging investments in R&I

Economic Impact
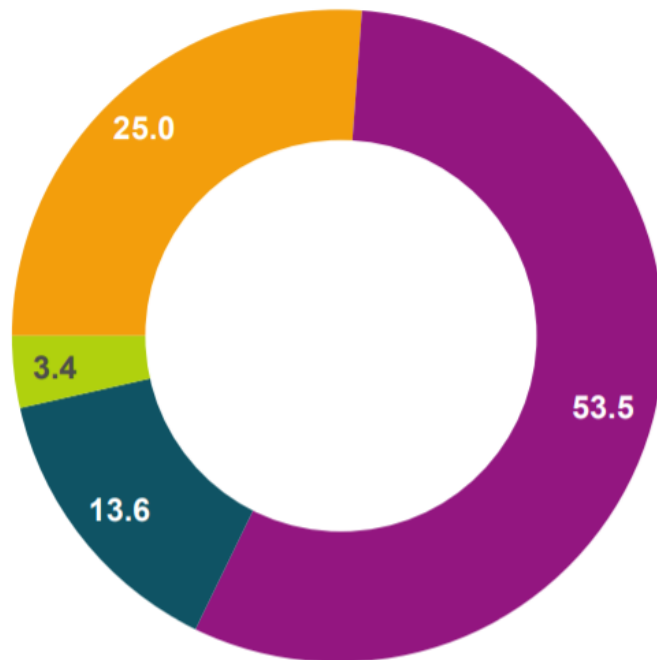
Horizon Europe
Structure

Pillar 1
EXCELLENT SCIENCE

- European Research Council
- Marie Skłodowska-Curie Actions
- Research Infrastructures

Pillar 2
GLOBAL CHALLENGES & EUROPEAN INDUSTRIAL COMPETITIVENESS

Clusters
- Health
- Culture, Creativity and Inclusive Society
- Civil Security for Society
- Digital, Industry and Space
- Climate, Energy and Mobility
- Food, Bioeconomy, Natural Resources, Agriculture and Environment

Joint Research Centre

Pillar 3
INNOVATIVE EUROPE

- European Innovation Council
- European innovation ecosystems
- European Institute of Innovation and Technology

WIDENING PARTICIPATION AND STRENGTHENING THE EUROPEAN RESEARCH AREA

- Widening participation and spreading excellence
- Reforming and Enhancing the European R&I system

Budget

Horizon Europe Budget: **€ 95.5 billion (2021-2027)** including €5.4 billion from Next Generation Europe Programme of EU

Political agreement December 2020
€ billion in current prices

- Excellent Science
- Global challenges and European ind. comp.
- Innovative Europe
- Widening Part and ERA

25.0 · 3.4 · 13.6 · 53.5

HORIZON EUROPE

Pillar III
INNOVATIVE EUROPE:

stimulating **market-creating breakthroughs** and **ecosystems** conducive to innovation

European Innovation Council

Support to innovations with breakthrough and market creating potential

European innovation ecosystems

Connecting with regional and national innovation actors

European Institute of Innovation and Technology (EIT)

Bringing key actors (research, education and business) together around a common goal for nurturing innovation

The budget: **€10.6 billion**, incl. up to **€527 million** for ecosystems (including NGEU – Recovery Fund parts dedicated to EIC).

circa **€3 billion**

European Innovation Council
Objectives and Structure

EIC aims to identify, develop and scale-up breakthrough technologies and companies, which are critical for EU policies to achieve the green and digital transition and help ensure future open strategic autonomy in critical technologies.

It is organised into three main funding schemes:

PATHFINDER

TRANSITION

ACCELERATOR

EIC Pathfinder

Supporting research and deep tech projects with a high degree of scientific ambition and risk.

EIC Transition

Supporting maturation and validation of novel ideas from lab to business. A bridge between research and application development.
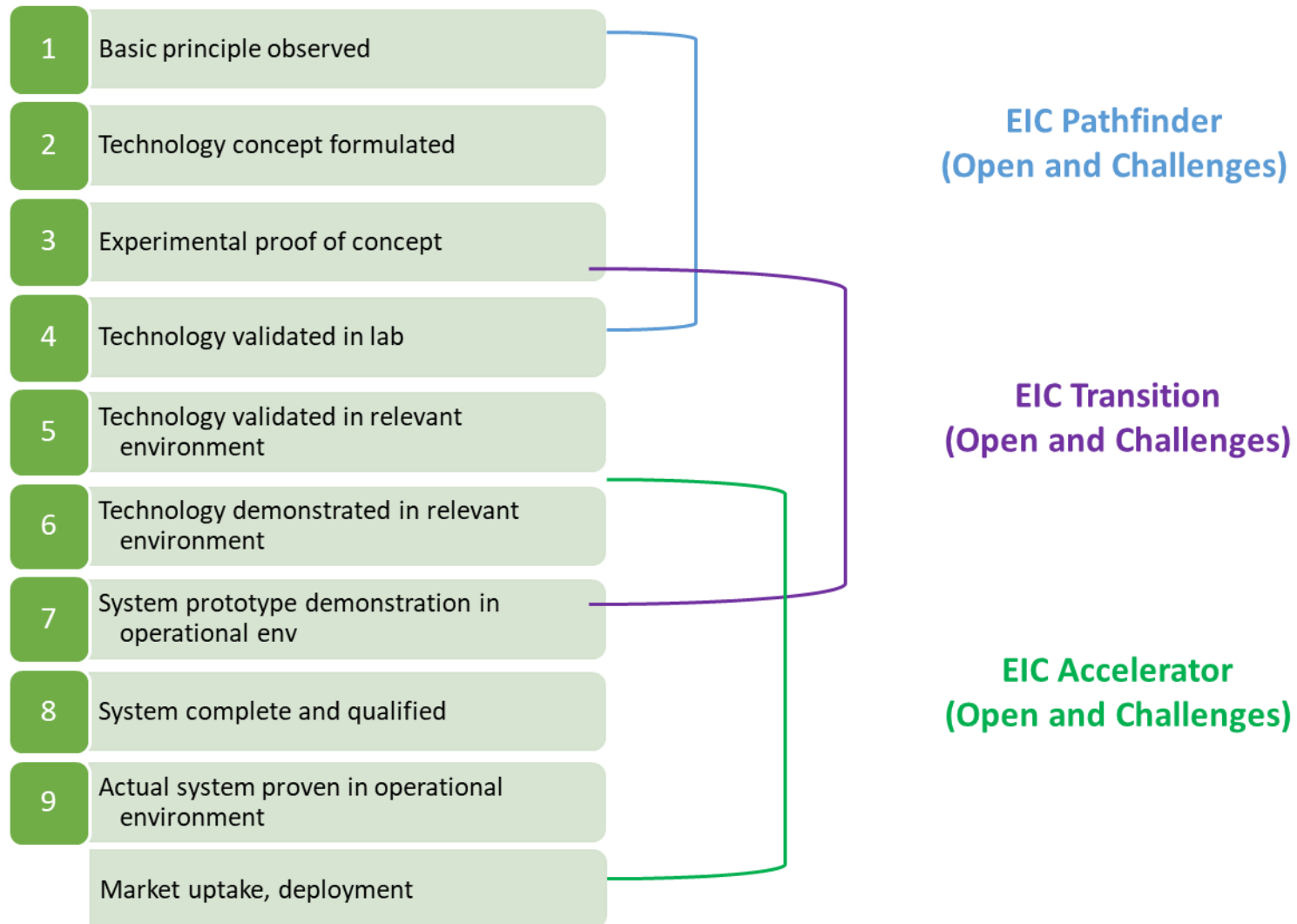
EIC Accelerator

Supporting start-ups and small and medium-sized enterprises to develop and scale up to new markets or disrupt existing ones.
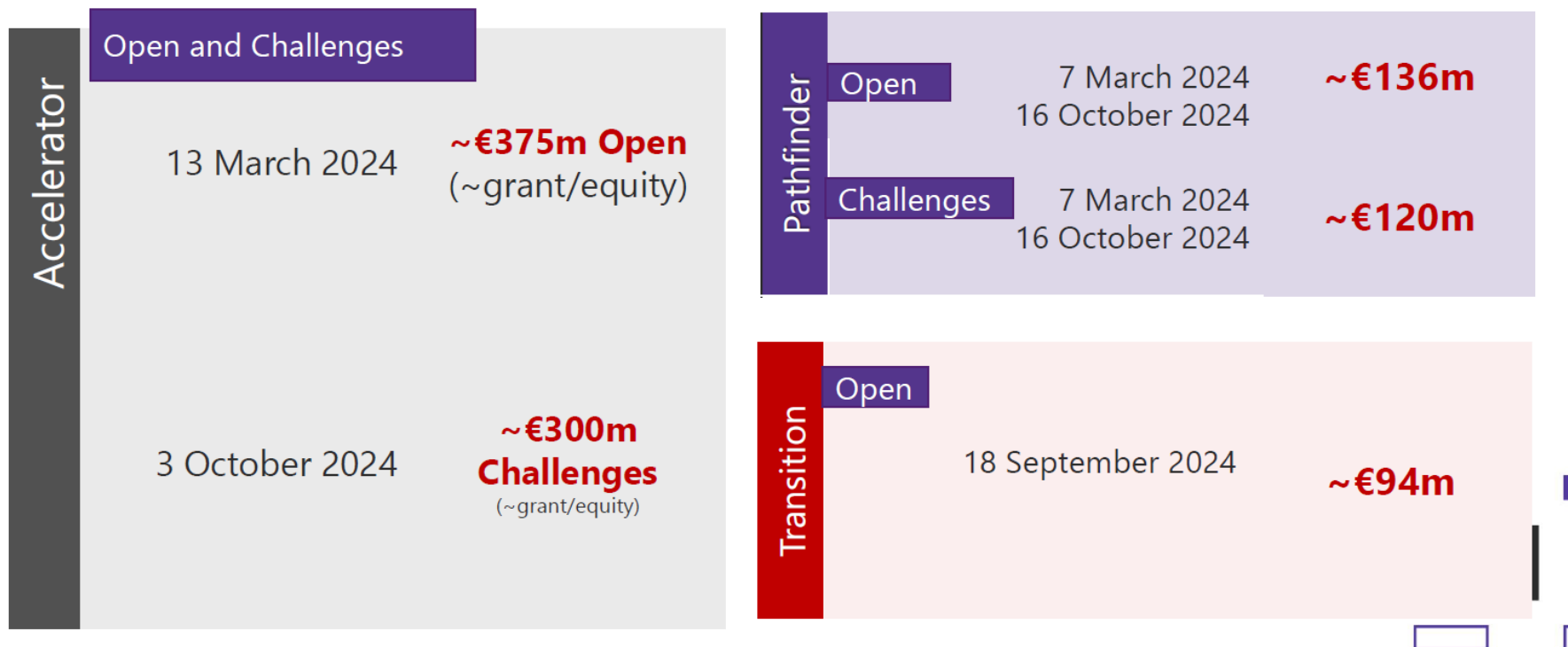
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Technology Readness Level

1	Basic principle observed
2	Technology concept formulated
3	Experimental proof of concept
4	Technology validated in lab
5	Technology validated in relevant environment
6	Technology demonstrated in relevant environment
7	System prototype demonstration in operational env
8	System complete and qualified
9	Actual system proven in operational environment
	Market uptake, deployment

EIC Pathfinder
(Open and Challenges)

EIC Transition
(Open and Challenges)

EIC Accelerator
(Open and Challenges)

EIC main calls in 2024 - overview

Accelerator

Open and Challenges

13 March 2024 — **~€375m Open** (~grant/equity)

3 October 2024 — **~€300m Challenges** (~grant/equity)

Pathfinder

Open — 7 March 2024 / 16 October 2024 — **~€136m**

Challenges — 7 March 2024 / 16 October 2024 — **~€120m**

Transition

Open — 18 September 2024 — **~€94m**

European Innovation Council
Work Programme 2024

Summary of main calls in 2024

Call	Who can apply	What for	EIC Open		EIC Challenges		
			Deadlines	Indicative Budget (EUR million)	EIC Challenge	Deadlines/ Cut-offs	Indicative Budget (EUR million)
EIC Pathfinder	Open call: only consortia can apply. Challenges call: smaller consortia (at least two eligible entities) or and single applicants as well as larger consortia.	Open Call: Grants up to EUR 3 million Challenge Call: Grants up to EUR 4 million. Higher amounts if duly justified. Projects to achieve the proof of principle and validate the scientific basis of breakthrough technologies (starting from early TRLs aiming at achieving TRL3 or 4)	7 March 2024	136	"Solar-to-X" devices Towards cement and concrete as a carbon sink Nature inspired alternatives for food packaging and films. Nanoelectronics for energy-efficient smart edge devices Protecting EU space infrastructure	16 October 2024	120
EIC Transition	Single applicants (SMEs, spin-offs, start-ups, research organisations, universities) or small consortia (minimum 2, maximum 5 eligible entities).	Grants of up to EUR 2.5 million to validate and demonstrate technology in application-relevant environment (starting at TRL 3/ 4 aiming at achieving TRL 5/ 6) and develop business and market readiness.	18th September 2024	94			
EIC Accelerator	Single start-ups and SMEs (including spin-offs), individuals (intending to launch a start-up/ SME) and in exceptional cases small mid-caps (fewer than 499 employees).	Grant component below EUR 2.5M for innovation activities (starting at TRL 5 or 6 aiming at achieving higher TRLs) Investment component of EUR 0.5 up to 15 million for scaling up and other activities. Grant only and investment only component under certain conditions.	Short applications: any time (continuous) Full applications: 13 March 2024 3 October 2024	375	Human Centric Generative AI Virtual worlds and augmented interaction, including support to Industry 5.0 Enabling the smart edge & quantum technology components Food from precision fermentation and algae Monoclonal antibody-based therapeutics for emerging viruses Renewable energy sources and their whole value chain	Short applications: any time (continuous) Full applications: 13 March 2024 3 October 2024	300

European Innovation Council
Work Programme 2024

Main novelties:

1. **A challenging budget**: Reduction in budget due to withdrawal of NGEU; Fewer challenges, Less deadlines;

2. **Simplification**: Introduction of lump sums on all main EIC calls (no Pathfinder open 2024);

3. **Strengthened evaluations**: Removal of rebuttal in Pathfinder call, More flexibility to set investment amount;

4. **More synergies**: Opening eligibility of Transition to results from Pillar 2;

5. **Economic security**: Following EU approach, targeted and proportionate measures have been introduced;

6. **Improved IP rules**: Responsibility of institution/ Tech Transfer Office – to support exploitation of results

European Innovation Council
EIC Pathfinder

Main features:

- funds research to develop the scientific basis (e.g. various activities at low Technology Readiness Levels from 1 to 4), to underpin breakthrough technologies;
- supports the earliest stages of scientific, technological or deep tech R&D;
- aims to build on new, cutting edge directions in science & technology to disrupt a field and a market or create new opportunities;
- realises innovative technological solutions to identify, develop and scale up breakthrough technologies and disruptive innovations in Europe.

European Innovation Council
EIC Pathfinder

Funding Schemes:

EIC Pathfinder Open — to support projects in any field of science, technology or application without predefined thematic priorities ('bottom-up')

EIC Pathfinder Challenges — to support coherent portfolios of projects within predefined thematic areas with the aim to achieve specific objectives for each Challenge

European Innovation Council
EIC Pathfinder Open

Call statistics 2021-2023

Call Statistics EIC Pathfinder 2021-2023				
Open	elegible proposals	funded proposals	EU contribution (M €)	success rate
2021	868	60	180,2	6,9%
2022	858	66	197,2	7,7%
2023	783	61	177	7,9%
Total	**2509**	**187**	**554,4**	**7,5%**
Challenges	elegible proposals	funded proposals	EU contribution (M €)	success rate
2021	403	42	146,8	10,4%
2022	436	49	178,2	11,2%
Total	**839**	**91**	**325**	**10,8%**

European Innovation Council
EIC Pathfinder Open

Why apply?

- Realise an ambitious vision for radically new technology with potential to create new markets and/or to address global challenges;
- Support for early stage development of such future technologies (e g. various activities at low TRL from 1 to 4 based on high risk/high gain science towards technology breakthrough research including 'deep tech');
- This research must provide the foundations of the technology you are envisioning.

Gatekeeper

Collaborative, interdisciplinary research, meeting the following criteria:

- convincing, long term vision of a radically new technology that has the potential to have a transformative positive effect to our economy and society;
- concrete, novel and ambitious science towards technology breakthrough, providing advancement towards the envisioned technology;
- high risk & high gain research approach & methodology , with concrete and plausible objectives. This research must provide the foundations of the technology you are envisioning.

EIC Pathfinder Open

Expected output – Open projects are expected to:

- provide a proof of principle that the main ideas of the envisioned future technology are feasible thus validating its scientific and technological basis
- include top level scientific publications in open access
- take the necessary measures to allow future uptake to take place for instance through an adequate formal protection of the generated Intellectual Property (and an assessment of relevant aspects related to regulation, certification, and standardization)
- involve and empower in their teams key actors that have the potential to become future leaders in their field such as excellent early career researchers or promising high tech SMEs, including start ups
- empower female researchers and to achieve gender balance among the work package leaders.

Consortium

- Proposals must be submitted by the coordinator on behalf of a consortium including as beneficiaries at least three legal entities, independent from each other and each established in a different country as follows
  - ✓ at least one legal entity established in a Member State and
  - ✓ at least two other independent legal entities, each established in different Member States or Associated Countries
- The legal entities may for example be universities, research organisations SMEs, start ups, industrial partners or natural persons

Support upon proposal funding

- A grant for a Research and Innovation Action to cover the eligible costs for the implementation of the project.
- For Pathfinder Open, the EIC considers proposals with a requested EU contribution of up to EUR 3 million as appropriate. Nonetheless, this does not preclude to request larger amounts, if properly justified.
- The funding rate of this grant will be 100% of the eligible costs.
- The total indicative budget for this call is EUR 120 million
- Successful applicants will receive tailor made access to a wide range of Business Acceleration Services and interactions with EIC Programme Managers

Projects funded through EIC Pathfinder are eligible to:

- receive EIC Booster grants (up to 3 per project or more if duly justified) of a fixed amount not exceeding EUR 50 000 to undertake complementary activities:
  - ✓ to explore potential pathways
  - ✓ to commercialization for portfolio activities
- submit an EIC Transition proposal
- submit an EIC Accelerator proposal via the Fast Track scheme
- participate in Next Generation Innovation Talents scheme (personnel costs of participating researchers are eligible under Pathfinder grants)

The application process:

- You must submit your application via the Funding and Tender Opportunities Portal before the given deadline
- You will be informed about the outcome of the evaluation within **5 months** from the call deadline (indicative)
- If your proposal is selected for funding, you can expect your grant agreement to be signed by 8 months after the call deadline
- The deadline to submit the proposal is **7 March 2024 at 17.00 CET**

The **application form** will have two parts:

- **Part A** (to be filled in directly online) contains administrative information about the applicant organisations, the summarised budget for the proposal and call-specific questions;

- **Part B** (to be downloaded from the Portal submission system, completed and then assembled and re-uploaded as a PDF single document) contains the technical description of the project. **Page limit: maximum of 20 A4 pages Section 1 to 3**. It contains the technical description of Annexes and supporting documents will be directly available in the submission system and must be uploaded as PDF files.

European Innovation Council
EIC Pathfinder Open

Evaluation procedure:

Submission → Individual evaluation phase → Evaluation committee phase → Feedback

Evaluation procedure
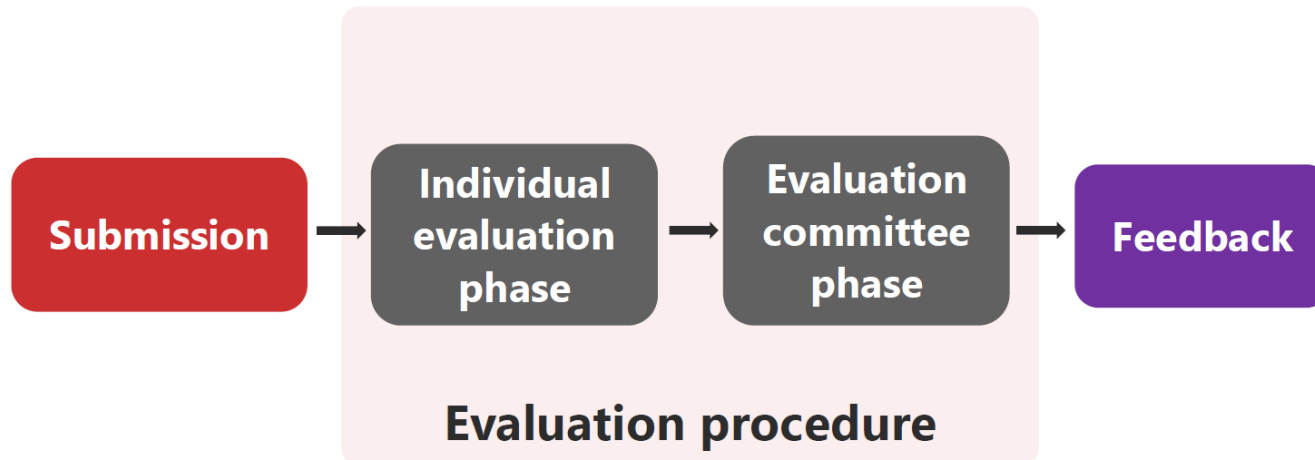
NEW The pilot on the rebuttal ("right to react") process has been discontinued

The individual evaluation phase

- At least four EIC expert evaluators evaluate and score the proposals individually with respect to the award criteria
  - ✓ Excellence (Threshold 4/5; Weight 60%)
  - ✓ Impact (Threshold 3,5/5; Weight 20%)
  - ✓ Quality and efficiency of the implementation (Threshold 3,5/5; Weight 20%)
- The score for each evaluation criterion will be the median of the evaluators' scores
- The overall score from this individual evaluation phase will be the weighted sum of the three median scores from the three award criteria.

The evaluation committee phase

- the evaluation committee will be composed of EIC expert evaluators different than those who evaluated the proposals individually;
- the final score will be decided based on the score from the individual evaluation phase and the outcome of the consensus discussions;
- EIC expert evaluators who evaluated and scored the proposals individually may be invited to the consensus discussions , in particular to clarify diverging evaluators' opinions.

Main features

- Build on new, cutting edge directions in science and technology
- Disrupt a market or to create new opportunities by realising innovative technological solutions grounded in high risk/high gain research and development;
- Establish a portfolio of projects for each Challenge that explore different perspectives, competing approaches or complementary aspects;
- Proactively steered by EIC Programme Managers

The 5 Challenges

1. Solar-to-X devices for the decentralised prosumption of renewable fuels, chemicals and materials as climate change mitigation pathway
2. Towards cement and concrete as a carbon sink
3. Nature inspired alternatives for food packaging and films for agriculture
4. Nanoelectronics for energy efficient smart edge devices
5. Strengthening the sustainability and resilience of EU space infrastructure

Challenge Guides will be published on the EIC website in early 2024

Expected output – Challenges projects are expected to:

- reach expected outcomes defined in the respective Challenge
- include top level scientific publications in open access
- take the necessary measures to allow future uptake to take place for instance through an adequate formal protection of the generated Intellectual Property (and an assessment of relevant aspects related to regulation, certification, and standardization)
- involve and empower in their teams key actors that have the potential to become future leaders in their field such as excellent early career researchers or promising high tech SMEs, including start ups
- empower female researchers and to achieve gender balance among the work package leaders.

Main features

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- Establish a portfolio of projects for each Challenge that explore different perspectives, competing approaches or complementary aspects;
- Proactively steered by EIC Programme Managers

European Innovation Council
EIC Pathfinder Challenges

Who can apply?

- Single legal entities established in a Member State or an Associated Country (mid-caps and larger companies will not be permitted);
- Consortia of two entities must be two independent legal entities from two different Member States or Associated Countries;
- Consortia of three or more entities must include as beneficiaries at least three legal entities, independent from each other and each established in a different country as follows:
    - ✓ at least one legal entity established in a Member State; and
    - ✓ at least two other independent legal entities, each established in different Member States or Associated Countries.

Support upon proposal funding

- A grant for a Research and Innovation Action to cover the eligible costs.
- For Pathfinder Challenges, the EIC considers proposals with an EU contribution of up to € 4 million as appropriate (larger amounts possible, if duly justified).
- The funding rate of this grant will be 100% of the eligible costs in the form of a lump sum.
- The total indicative budget for this call is EUR 136 million
- Successful applicants will receive tailor made access to a wide range of Business Acceleration Services and interactions with EIC Programme Managers

European Innovation Council
EIC Pathfinder Challenges

The application process:

- You must submit your application via the Funding and Tender Opportunities Portal before the given deadline
- You will be informed about the outcome of the evaluation within **5 months** from the call deadline (indicative)
- If your proposal is selected for funding, you can expect your grant agreement to be signed by 8 months after the call deadline
- The call will open on 20 June 2024.
- The deadline to submit the proposal is **16 October 2024 at 17.00 CET**

The **Proposal Application Form** is composed of two parts

- **Part A:** to be filled online (no page limit). It contains administrative details, the summarised budget and call specific questions.
- **Part B:** to be uploaded as a single document (page limit: maximum of 30 A4 pages Section 1 to 3). It contains the technical description of the project.

The estimated budget must be described in a detailed budget table. This will be used as a basis for justifying and/or fixing the lump sum amount

The evaluation procedure:

Step 1 — **Step 2**

Submission → Assessment of each proposal separately → Portfolio considerations → Feedback

Evaluation procedure
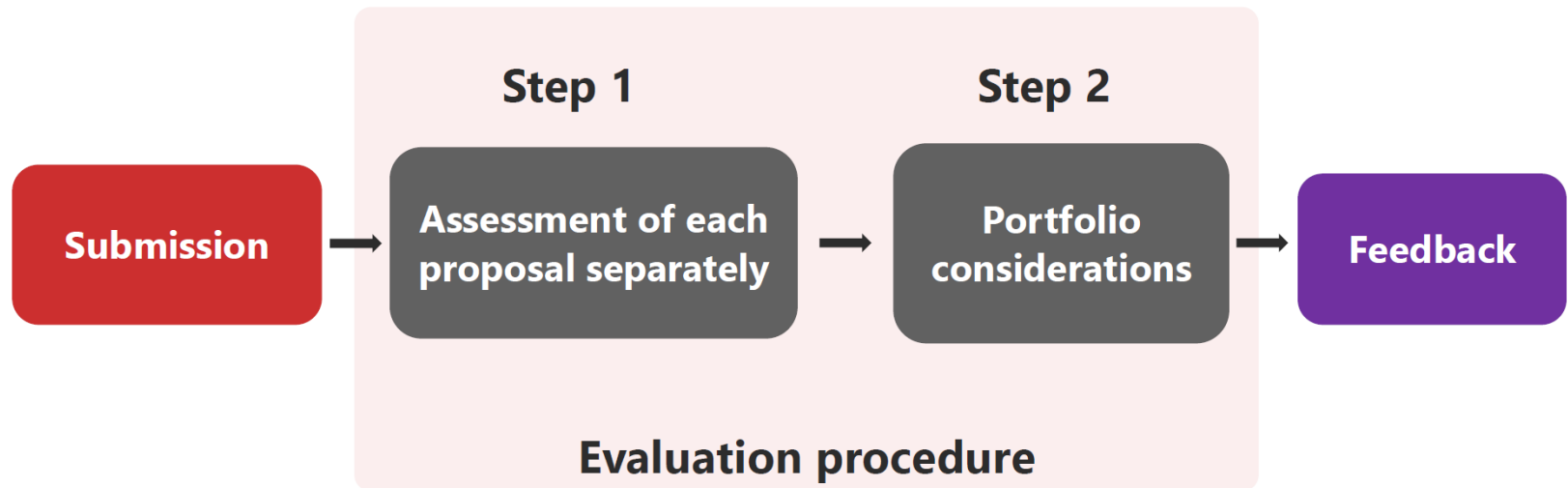
NEW The pilot on the rebuttal ("right to react") process has been discontinued

The evaluation procedure: Step 1

- At least three EIC expert evaluators evaluate and score each proposal individually with respect to the award criteria
- After the individual evaluation, these evaluators will get together in a consensus group to agree on a common position on comments and scores.
- The evaluation committee (composed of EIC expert evaluators and EIC Programme Managers) will check consistency across the evaluation of each individual proposal and finalise the scores and comments for all proposals

The evaluation procedure: Step 2

- All proposals that meet the thresholds defined in the award criteria will be considered in step 2
- Mapping of proposals in categories stemming from overall goal and specific objectives of the Challenge
- A suitable portfolio of proposals to be selected by evaluation committee by applying portfolio considerations in order to propose for funding a coherent set of projects that will achieve expected outcomes and impacts of the Challenge and maximise their impact.
- Further information and details about categories and portfolio considerations to be detailed in EIC Pathfinder Challenge Guides , which will be topic and domain specific
- Evaluation committee may also propose some minor adjustments to the proposals.

European Innovation Council
EIC Pathfinder Challenges

Pathfinder calls 2024 Summary table:

	Pathfinder Open	Pathfinder Challenges
Total budget	**€136 million**	**€120 million**
Proposals	Up to €3 million	Up to €4 million
Funding rate	100% of eligible costs	100% of eligible costs
Opening	2 January 2024	20 June 2024
Deadline	7 March 2024 at 17.00 CET	16 October 2024 at 17.00 CET
Length	20-page proposal (part B)	30-page proposal (part B)
Applicants	**Consortia:** min. 3 partners from 3 different Member States /Associated Countries of which at least 1 partner in a Member State	**Consortia:** • If 2 partners: from different MS/AC, • If 3+ partners: from min 3 different MS/AC of which at least 1 partner in a MS **Single legal entities** in a MS/AC

Il Programma Quadro Horizon Europe
Grant Office – Attività e Servizi di supporto

Servizi Informativi e Formativi

Supporto alla presentazione delle proposte

Supporto alla gestione dei progetti

HORIZON EUROPE

Health

Culture, Creativity & Inclusive Societies

Civil Security for Society

Digital, Industry & Space

Climate, Energy & Mobility

Food, Bioeconomy, Natural Resources, Agriculture & Environment

Il Programma Quadro Horizon Europe

Grant Office – Attività e Servizi di supporto

Servizi Informativi e Formativi

- Organizzazione info-days;
- Incontri presso Dipartimenti e Centri di ricerca;
- Organizzazione corsi di formazione;
- Informative mail mirate;
- Attività in front office e/o in remoto.

Il Programma Quadro Horizon Europe
Grant Office – Attività e Servizi di supporto

Supporto alla presentazione delle proposte

- Individuazione e/o analisi call e topic;
- Assistenza tecnica sul Funding & Tender Portal;
- Supporto alla redazione delle parti amministrative della proposta;
- Supporto alla predisposizione del budget;
- Pre-screening della proposta.
- Analisi Evaluation Summary Report.

Il Programma Quadro Horizon Europe
Grant Office – Attività e Servizi di supporto
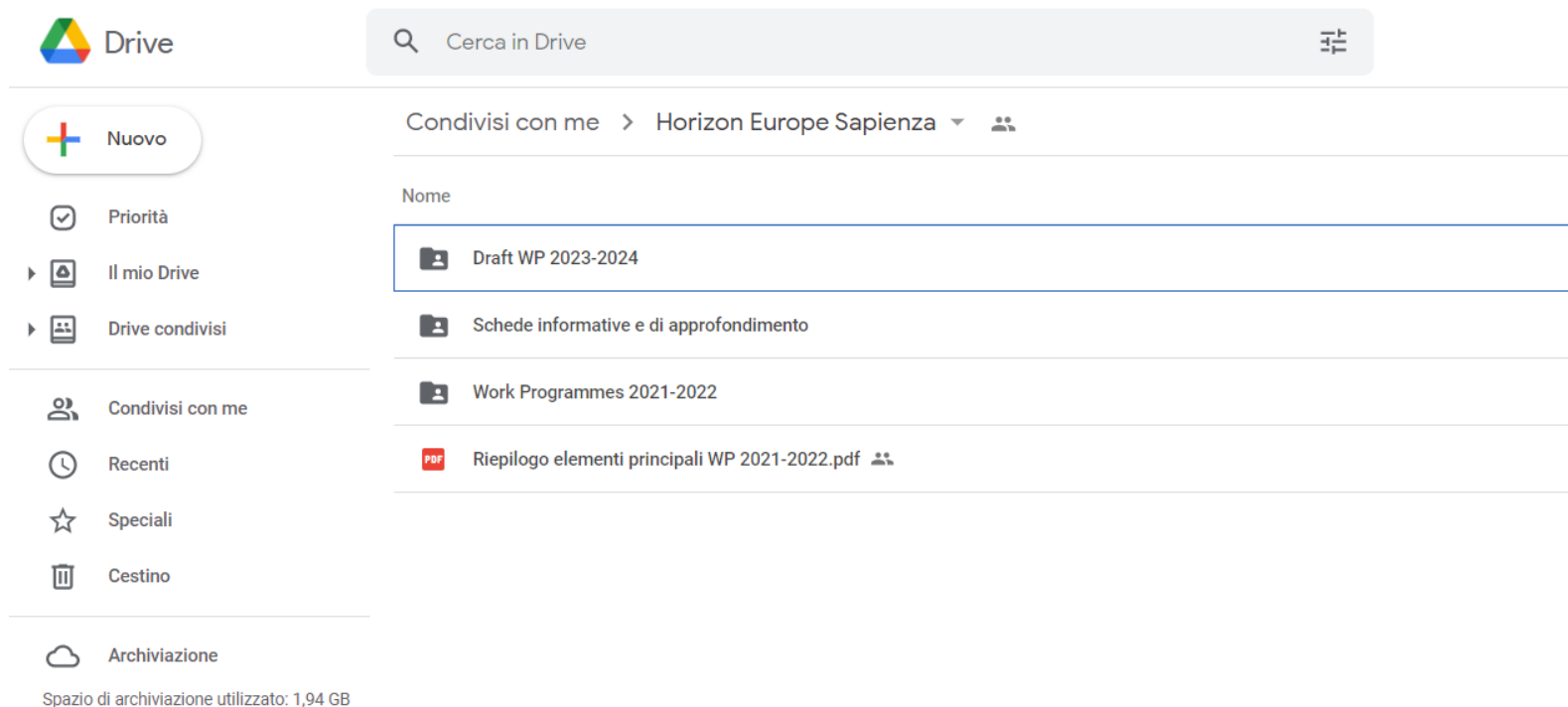
Supporto alla gestione dei progetti

- Assistenza tecnica per la stipula del Grant Agreement e del Consortium Agreement;
- Supporto alla corretta applicazione e rendicontazione delle procedure di spesa;
- Assistenza tecnica in caso di audit.

Cartella Google Drive Condivisa
Grant Office – Attività e Servizi di supporto

Bando "Coordinamento progetti collaborativi Horizon Europe"

Finanziamento di attività funzionali a supportare la presentazione di Proposte progettuali collaborative coordinate Sapienza su call emanata Horizon Europe, ad eccezione di ERC e MSCA.

Il contributo richiesto potrà essere pari ad un importo massimo di € 10.000,00, per la realizzazione di attività quali:

- servizi di consulenza e/o prestazioni professionali erogati da enti o soggetti giuridici esperti in progettazione comunitaria;
- organizzazione presso Sapienza o partecipazione ad uno o più meeting di lavoro tra soggetti potenzialmente interessati ad aderire al Consorzio che presenterà la Proposta progettuale;
- partecipazione ad attività formative in materia di Horizon Europe o di progettazione comunitaria, a cura di enti specializzati.
- attività di ricerca

Il Programma Quadro Horizon Europe
Grant Office – Attività e Servizi di supporto

Bando "Award Horizon Europe"

Conferimento di un award per proposte progettuali collaborative presentate nell'ambito di Horizon Europe che siano state già valutate positivamente dalla Commissione Europea, pur non avendo ricevuto il finanziamento.

Il contributo potrà essere pari ad un importo massimo di
- € 50.000,00, per proposte collaborative coordinate da Sapienza;
- € 25.000,00, per proposte collaborative non coordinate da Sapienza.

Il finanziamento è utilizzabile dal vincitore dell'Award per sostenere costi inerenti allo svolgimento di attività di ricerca, preferibilmente finalizzate alla predisposizione di nuove proposte progettuali nell'ambito di Horizon Europe.

Funding Institutional

Strumento online promosso da Elsevier che permette a docenti, ricercatori e dottorandi di individuare nuove opportunità di finanziamento a livello internazionale, compatibili con il proprio livello di carriera e i propri interessi di ricerca.

Per maggiori informazioni:
Funding Institutional
Sapienza Funding Institutional

Human Resources Excellence in Research Award

Il 16 novembre 2020 la Commissione europea ha conferito a Sapienza lo **Human Resources Excellence in Research Award**, in attuazione dei principi della **Carta europea dei ricercatori** e del **Codice di condotta per l'assunzione dei ricercatori**. È stato dunque riconosciuto l'impegno dell'Ateneo a migliorare le proprie politiche a favore dei ricercatori in linea con la Carta europea dei ricercatori e il Codice di condotta per il reclutamento dei ricercatori.

Thank you for your attention!

Emanuele Gennuso
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International Research Office
Grant Office Unit

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