

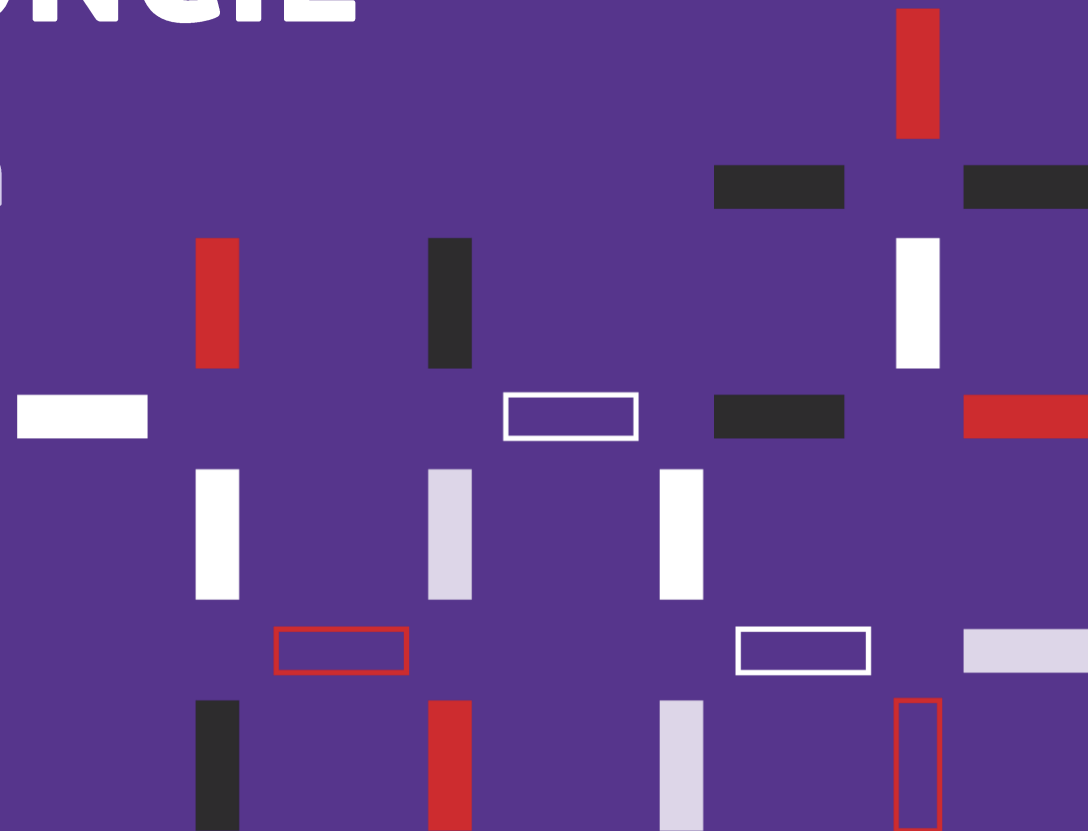


# THE EUROPEAN INNOVATION COUNCIL

EIC Pathfinder - Novelty in  
processes and calls in 2024

Carlos Casorrán, Ph.D.

Project Advisor, Pathfinder Unit





- 1. Policy context / Global overview**
- 2. Pathfinder Open**
- 3. Pathfinder Challenges**



Recording of the EIC WP 2024 Info Day:  
<https://www.youtube.com/watch?v=8HIQCnZnFZw>

# Europe's most ambitious innovation initiative

Budget

€ 10 billion

European  
Innovation  
Council



Unique

combines research & accelerator for SMEs, startups, scaleups

Largest deep-tech investor in Europe

Over €3 billion

Enhances the European Innovation Ecosystems

Partnerships with ERC, EIT regions...

## Annual Work Programmes (separate from Horizon Europe main WP)

- First WP (2021) adopted 18 March 2021, €1.5 billion
- Second WP (2022) adopted 7 February 2022, €1.7 billion
- Third Work Programme (2023) adopted 7 December 2022, € 1.7 billion
- **Fourth Work Programme (2024) adopted 12 December 2023, € 1.2 billion**



## Pathfinder

- For **consortia**
- **TRL 1-4** (Early stage research on breakthrough technologies)
- Grants up to € 3 to 4 million

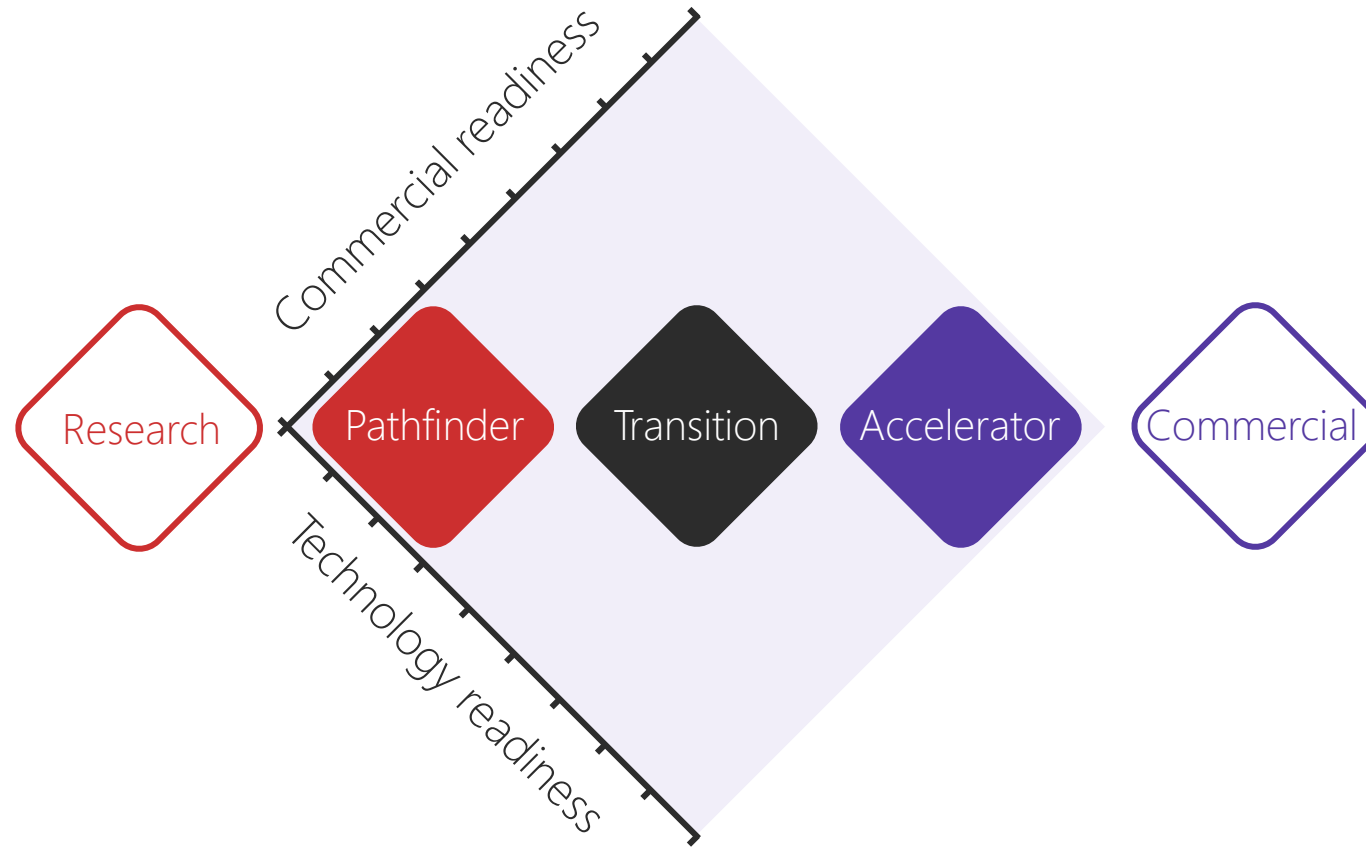
- For **consortia & single** researchers /companies
- **TRL 3-6** (Proof of concept to validation)
- Grants up to € **2.5 million**

## Transition

- For **individual companies**
- TRL 6-9 (Development & scale up)
- **Blended** finance
  - grants up to € 2.5 million
  - equity up to €15 million

## Accelerator

EIC stages the entrepreneurial journey as pathfinder, transition, accelerator with increasing readiness levels



# What is the EIC Pathfinder?



## The **EIC Pathfinder**

- funds **research** to develop the **scientific basis** 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 and 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



## EIC Pathfinder **Open**

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

## EIC Pathfinder **Challenges**

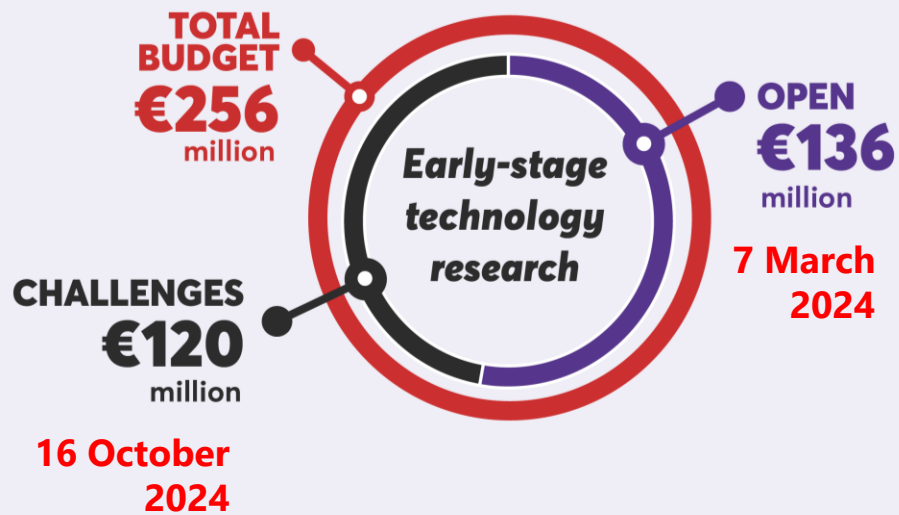
to support **coherent portfolios** of projects within predefined thematic areas with the aim to achieve specific objectives for each Challenge



# EIC main calls in 2024 - overview



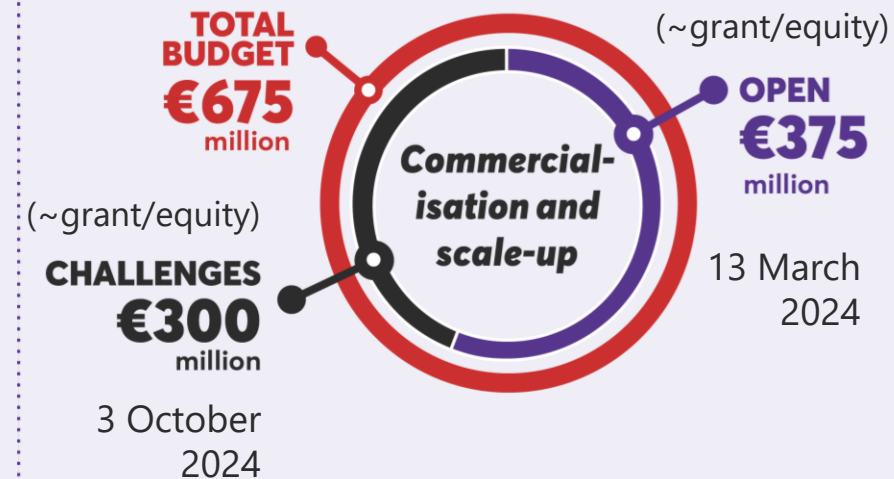
## EIC PATHFINDER



## EIC TRANSITION



## EIC ACCELERATOR





# A Challenging Budget



Reduction of over €400 million from 2023 to 2024 due to withdrawal of NGEU

	2021	2022	2023	2024	2025	2026	2027
<b>Horizon Europe</b>	1127.5	1150.2	1173.2	1202.1	1226.1	1250.7	1275.7
<b>Next Generation EU</b>	430.2	426.0	434.5	-	-	-	-
<b>Total</b>	<b>1557.7</b>	<b>1576.2</b>	<b>1607.7</b>	<b>1202.1</b>	<b>1226.1</b>	<b>1250.7</b>	<b>1275.7</b>

*EUR Million. Not including EFTA and third country appropriations*

- **Reduction in budget of all main calls (Pathfinder, Transition, Accelerator)**
  - **Pathfinder: €256 million**
  - **Transition: €94 million**
  - **Accelerator: €675 million**
- **Fewer challenges:** no Transition challenges, 5 Pathfinder and 6 Accelerator challenges



# Call statistics EIC Pathfinder 2021-2023

<b>open</b>	eligible proposals	funded proposals	EU contribution	success rate
2021	868	60	180,2 M€	6,9%
2022	858	66	197,2 M€	7,7%
2023	783	61	177 M€	7,9%
<b>Total</b>	<b>2509</b>	<b>187</b>	<b>554,4 M€</b>	<b>7,5%</b>

<b>challenges</b>	eligible proposals	funded proposals	EU contribution	success rate
2021	403	42	146,8 M€	10,4%
2022	436	49	178,2 M€	11,2%
<b>Total</b>	<b>839</b>	<b>91</b>	<b>325 M€</b>	<b>10,8%</b>

# PATHFINDER CHALLENGES

## PROPOSALS SUBMITTED

DEADLINE OCTOBER 2023



**371**

**Proposals submitted**



**€163.5 Million**

**Estimated budget**



**2077**

**Participants**



**41**

**Countries**



**€3.2 Million**

**Average EU grant**



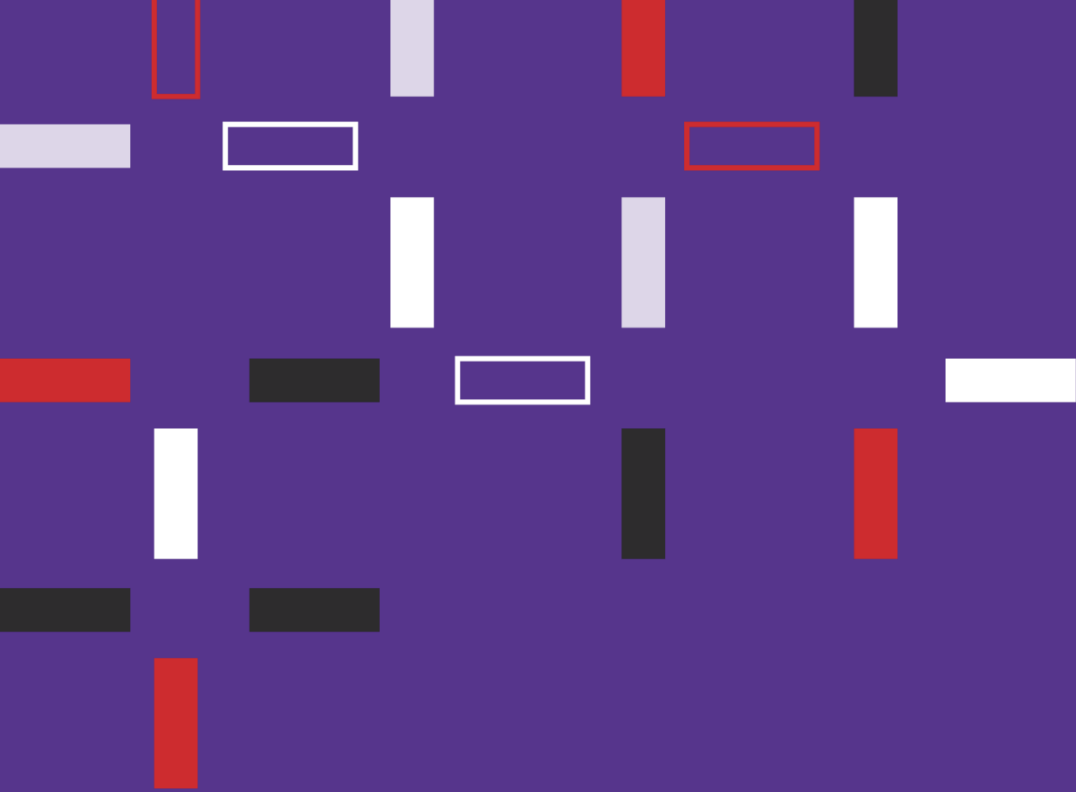
**2024**

**Results Spring 2024**

- 116 proposals under Responsible electronics
- 81 proposals under Precision nutrition
- 69 proposals under Clean and efficient cooling
- 66 proposals under Architecture, Engineering and Construction digitalisation for a novel triad of design, fabrication, and materials
- 39 proposals under In-space solar energy harvesting for innovative space applications

European  
Innovation  
Council





# EIC Pathfinder



2024 EIC  
Pathfinder **Open**  
call & its main  
novelties



**What's  
new?**

# Why should you apply?



- You should apply if you are looking for support from EIC Pathfinder Open to realise **an ambitious vision for radically new technology**, with potential to create new markets and/or to address global challenges.
- EIC Pathfinder Open supports **early stage development of such future technologies** (e.g. various activities at low **Technology Readiness Levels 1-4**), 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.





Collaborative, interdisciplinary research, meeting the following Gatekeepers:

- **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.





- **Proof of principle** that the **main ideas of the envisioned future technology are feasible**, thus validating its scientific and technological basis
- Project results should include **top-level scientific publications** in open access
- Projects are expected to take the necessary measures to **allow future uptake to take place**, for instance through an **adequate formal protection of the generated Intellectual Property (IP) and an assessment of relevant aspects related to regulation, certification, and standardization.**
- Projects are encouraged to involve and empower **key actors in their teams** 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
- Project are also encouraged to **empower female researchers** and to achieve gender balance among the work package leaders

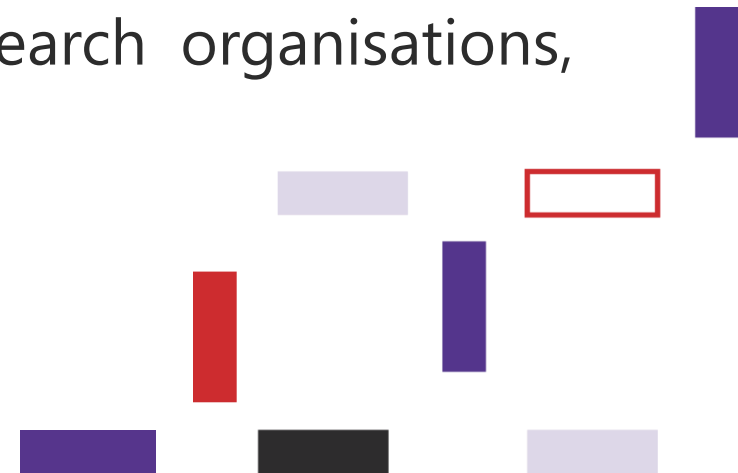
NEW



# Can you apply? Consortium composition



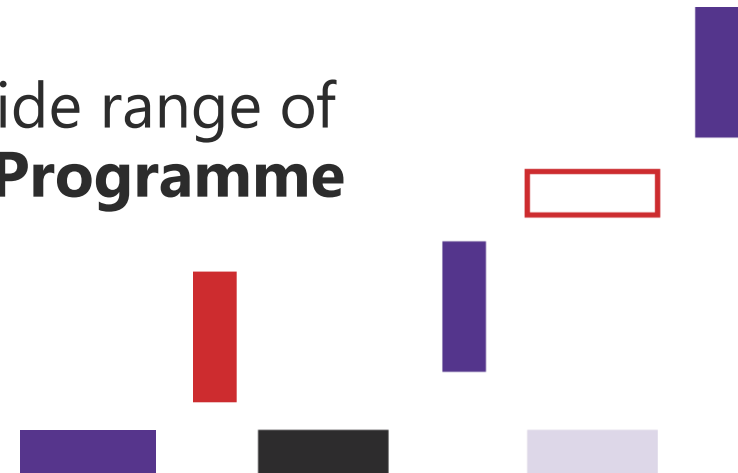
- Proposals must be **submitted by the coordinator**, on behalf of a consortium including as beneficiaries at least three legal entities, independent from each other and each established in a different country as follows:
  - at least one legal entity established in a Member State; and
  - at least two 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.



# What support will you receive if your proposal is funded?



- You will receive a grant for a **Research and Innovation Action** to cover the **eligible costs**, necessary for the implementation of your project.
- For this call, the EIC considers proposals with a requested EU contribution of **up to EUR 3 million** as appropriate. Nonetheless, this does not preclude you 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 **136 million**.
- Successful applicants will receive tailor-made access to a wide range of **Business Acceleration Services** and interactions with **EIC Programme Managers**



# Additional opportunities for Pathfinder selected projects



**Projects** funded through EIC Pathfinder are eligible:

- to receive additional **EIC Booster grants** (up to 3 per project or more if duly justified) of up to EUR 50 000 to undertake complementary activities:
  - to explore potential pathways to commercialization
  - for portfolio activities
- to submit an **EIC Transition** proposal
- to submit an **EIC Accelerator** proposal via the **Fast Track** scheme
- to participate in '**Next Generation Innovation Talents**' scheme (personnel costs of participating researchers are eligible under Pathfinder grants)



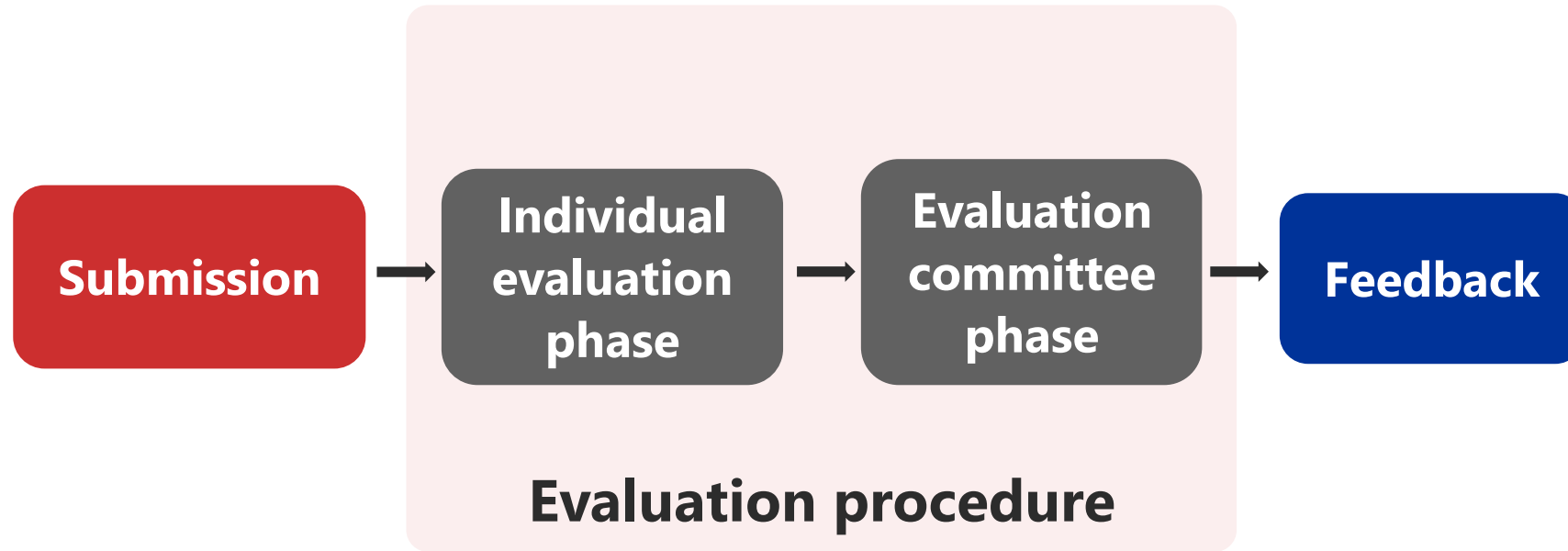
# How do you apply; how long does it take?



- 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 17h00 CET**.



# How is proposal funding determined?



**NEW**

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



# Proposal Application Form



- **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 **20** A4 pages – Section 1 to 3). It contains the technical description of the project. Modified to reflect the award criteria as indicated in the EIC Work Programme 2024.

Template available on the [Funding and Tender Opportunities Portal](#)

NEW





- At least four EIC expert evaluators evaluate the proposals with respect to the **award criteria**:
  - Excellence
  - Impact
  - Quality and efficiency of the implementation
- The **remote score** for each evaluation criterion will be the **median of the evaluators' scores**.
- The **overall remote score** will be the **weighted sum** of the three median scores from the three evaluation criteria.



# Award criterion “Excellence”



Threshold  
4/5

Weight  
60%

- **Long-term vision:** How convincing is the vision , which the project would contribute in the long term?
- **Science-towards-technology breakthrough:** How concrete, novel and ambitious is the proposed science-towards-technology breakthrough with respect to the state-of-the-art? What advancement does it provide towards realising the envisioned technology?
- **Objectives:** How concrete and plausible are the proposed objectives **to reach the envisaged proof of principle**? To what extent is the high-risk/high-gain research approach appropriate for achieving them? How sound is the proposed methodology, including the underlying concepts, models, assumptions, alternative directions and options, appropriate consideration of the gender dimension in research content, and the quality of open science practices?
- **Interdisciplinarity:** How relevant is the interdisciplinary approach from traditionally distant disciplines for achieving the proposed breakthrough?

NEW



# Award criterion “Impact”

Threshold  
3.5/5

Weight  
20%

European  
Innovation  
Council



- **Long-term impact:** How significant are the potential transformative positive effects that the envisioned new technology would have to our economy, environment and society?
- **NEW** **Innovation potential:** **To what extent does the envisioned new technology have potential for generating disruptive innovations in the future and for creating new markets?** How adequate are the proposed measures for protection of results and any other exploitation measures to facilitate future translation of research results into innovations? How suitable are the proposed measures for involving and empowering key actors that have the potential to take the lead in translating research into innovations in the future?
- **NEW** **Communication and Dissemination:** How suitable are the measures to maximise expected outcomes and impacts, including **scientific publications**, communication activities, for raising awareness about the project results’ potential to establish new markets and/or address global challenges?

# Award criterion “Quality and efficiency of the implementation”



Threshold  
3/5

Weight  
20%

- **Work plan:** How coherent and effective are the work plan (work packages, tasks, deliverables, milestones, time-line, etc.) and risk mitigation measures in order to achieve the project objectives?
- **Allocation of resources:** How appropriate and effective is the allocation of resources (comprising person-months and other cost items) to work packages and consortium members?
- **Quality of the consortium:** To what extent do **all** the consortium members have the necessary **capacity and** high quality expertise for performing the project tasks?

NEW

# 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.



# Ranking list – Equal score resolution



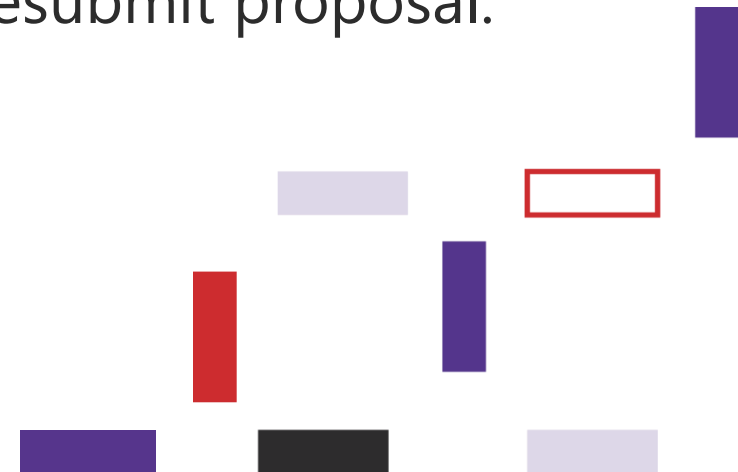
**Proposals with the same scoring** will be untied based on the following factors, in order

- higher score under the criterion Excellence
- higher score under the criterion Impact
- gender balance among the work package leaders as identified in the proposal
- number of applicants that are SMEs
- number of Member States and Associated Countries represented in the consortium
- If needed, other factors determined by the evaluation committee



Applicants will receive an **Evaluation Summary Report** that will comprise of:

- the **final score**;
- a **collation of the comments from individual reports**, or extracts of them
- a **comment that summarises** the assessment by the evaluation committee;
- **additional comments**, possibly including advice not to resubmit proposal.



# Main changes – Pathfinder Open



- Overall, the general call text of the EIC Pathfinder Open call 2024 remained relatively stable compared to 2023, with only minor changes
- Main novelties for **Pathfinder Open**:
  - Increase of page limit for sections 1-3 of app. form (part B) from **17** to **20**
  - Added reference to assessment of relevant aspects related to regulation, certification, and standardization as example for expected project results
  - Small revisions of the three award criteria
  - Discontinuation of rebuttal pilot



2024 EIC  
Pathfinder  
**Challenges** call &  
its main  
novelties



**What's  
new?**



**Iordanis Arzimanoglou**  
*Biotechnology & Health*

**Enric Claverol-Tinturé**  
*MedTech & Medical Devices*

**Francesco Matteucci**  
*Materials for Energy & Environment*

**Antonio Marco Pantaleo**  
*Energy Systems*

**Stella Tkatchova**  
*Space systems & technologies*

**Federica Zanca**  
*Incoming PM for Health & AI*

**Samira Nik**  
*Quantum tech & electronics*

**Franc Mouwen**  
*Architecture engineering  
construction technologies*

**Ivan Stefanic**  
*Food chain technologies, novel & sustainable food*

**Isabel Obieta**  
*Sustainable electronics*

**Carina Faber**  
*Renewable energy conversion & alternative resource  
exploitation*

**EIC  
PROGRAMME  
MANAGERS**

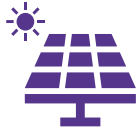




# EIC Pathfinder challenges



## PATHFINDER CHALLENGES



Solar-to-X devices for the decentralised presumption of renewable fuels, chemicals and materials as climate change mitigation pathway

€ 24 million



Towards cement and concrete as a carbon sink

€ 24 million



Nature inspired alternatives for food packaging and films for agriculture

€ 24 million



Nanoelectronics for energy efficient smart edge devices

€ 24 million



Strengthening the sustainability and resilience of EU space infrastructure

€ 24 million

**Indicative call budget**

**€ 120million**

Infoday on Pathfinder Challenges with Programme Managers on 20/03/2024

# Main changes – Pathfinder Challenges



- **Introduction of lump sum funding**
- Increase of page limit for sections 1-3 of application form (part B) from **25** to **30**
- **Consensus meetings during evaluation process**
- Added reference to assessment of relevant aspects related to regulation, certification, and standardization as example for expected project results
- Small revision of the Implementation award criterion
- Discontinuation of rebuttal pilot



# Lump sum funding

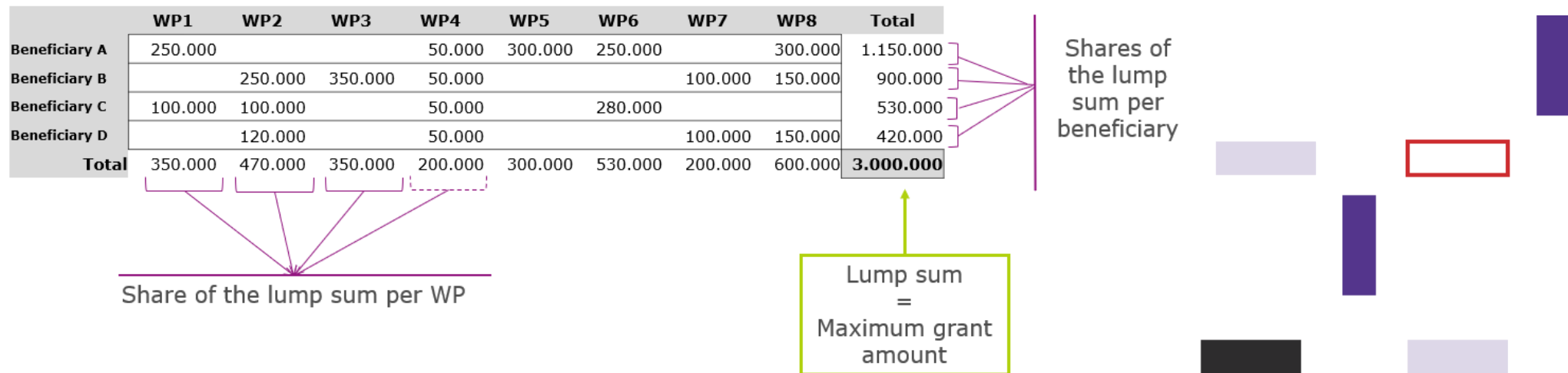
**NEW**



- Funding rate is 100% of the eligible costs **in the form of a lump sum**
- Applicants must **propose the amount of the lump sum** based on their estimated costs → **detailed budget table**

Practically:

- No changes to the pre-financing rates
- **One lump sum share per work package and beneficiary, paid upon its completion**
- Very simple financial reporting



# Evaluation of a lump sum proposal

NEW

European  
Innovation  
Council



- Cost estimations will be assessed under the **implementation** criterion.
- Experts will:
  - ensure that the cost estimations are **reasonable and non-excessive**
  - evaluate whether the proposed resources and the split of the lump sum **allow completing the activities described in the proposal**.
- If the experts find overestimated or underestimated costs, they make **concrete recommendations** on the budget. This will be reflected in a modified lump sum (overall or per work package).
- Changes to the budget normally do not lead to a **decreased score** (except if there are major issues with the budget).





## Significant simplification potential

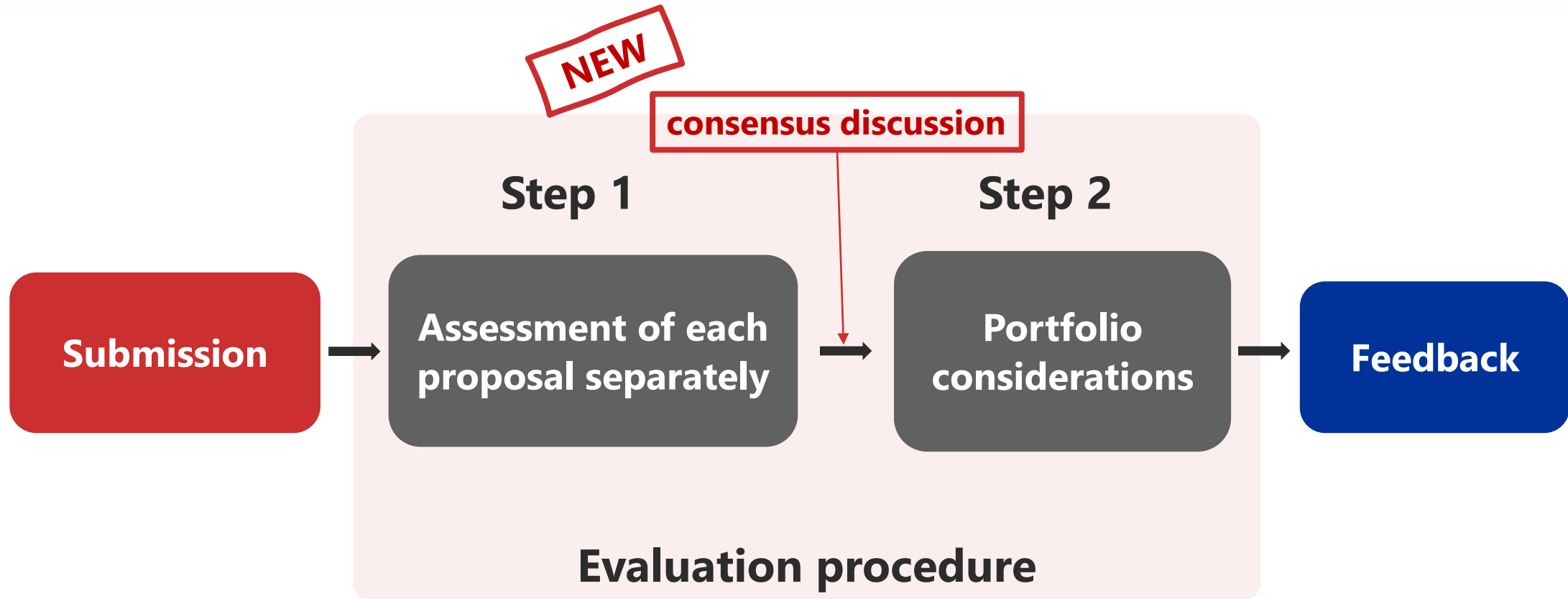
- Lump sums remove the obligation to report actual costs and resources
- Easier to use for beneficiaries with limited experience

## Focus on content

- Focus less on financial management and more on content



# How is proposal funding determined?



**NEW**

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





# Improved IP Rules

**Targeted changes**  
following statement  
by various university  
and technology  
organisations and  
Statement by EIC  
Board

**Clearer definition of  
EIC Inventor** – as  
defined in patent  
application (not co-  
author of scientific  
publication etc)

**Responsibility of  
institution/ Tech  
Transfer Office** – to  
support exploitation  
of results

**Access rights of EIC  
inventor** – in case  
institution/ Tech  
Transfer Office unable  
or unwilling to  
support exploitation  
(within 6 month  
period)

# Pathfinder calls 2024 – Summary table



	Pathfinder Open	Pathfinder Challenges
Total budget	<b>€136 million</b>	<b>€120 million</b>
Proposals	Up to €3 million	Up to €4 million
Funding rate	100% of eligible costs	100% of eligible costs (lump sum)
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	<p><b>Consortia:</b> min. 3 partners from 3 different Member States /Associated Countries of which at least 1 partner in a Member State</p>	<p><b>Consortia:</b></p> <ul style="list-style-type: none"> <li>• If 2 partners: from different MS/AC,</li> <li>• If 3+ partners: from min 3 different MS/AC of which at least 1 partner in a MS</li> </ul> <p><b>Single legal entities</b> in a MS/AC</p>





# Thank you !

@EUeic

#Eueic

© European Union, 2021

Reuse of this document is allowed, provided appropriate credit is given and any changes are indicated (Creative Commons Attribution 4.0 International license). For any use or reproduction of elements that are not owned by the EU, permission may need to be sought directly from the respective right holders.

All images © European Union, unless otherwise stated. Image sources: ©Tom Merton/Caia Image, #315243588; ©REDPIXEL, #220695664; ©Halfpoint, #180578699; ©bnenin #213968072; ©MyMicrostock/Stocksy, #3094437622021. Source: Stock.Adobe.com. Icons © Flaticon – all rights reserved.

