





Deadline	Weds 16 October 2024 17:00 Brussels time (IOCB deadline Weds 9 Oct 2024)
Call name	EIC Pathfinder Challenges 2024
www	https://eic.ec.europa.eu/eic-funding-opportunities/eic-pathfinder_en Solar to X devices (https://ec.europa.eu/info/funding- tenders/opportunities/portal/screen/opportunities/topic-details/horizon-eic-2024- pathfinderchallenges-01-01) Towards cement and concrete as a carbon sink (https://ec.europa.eu/info/funding-
	tenders/opportunities/portal/screen/opportunities/topic-details/horizon-eic-2024-pathfinderchallenges-01-02) Nature inspired alternatives for food packaging and films for agriculture (https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-
	details/horizon-eic-2024-pathfinderchallenges-01-03) Nanoelectronics for energy-efficient smart edge devices (https://ec.europa.eu/info/funding-tenders/opportunities/topic-details/horizon-eic-2024-pathfinderchallenges-01-04) Strengthening the sustainability and resilience of EU space infrastructure (https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/horizon-eic-2024-pathfinderchallenges-01-05)
Focused on	Building on new, cutting-edge directions in science and technology to disrupt a field and a market or create new opportunities by realising innovative technological solutions grounded in high-risk/high-gain research and development. With each specific Challenge, the EIC will establish a portfolio of projects that explore different perspectives, competing approaches or complementary aspects of the Challenge. Calls in 2024 under the following challenges: • Solar-to-X devices for the decentralized prosumption of renewable fuels, chemicals and materials as climate change mitigation pathway focusing on one chosen subsection — - Standalone solar-to-X device development - Benchmarking and common metrics development for solar-to-X devices - Understanding fundamental mechanisms by means of computational materials science • Towards cement and concrete as a carbon sink • Nature inspired alternatives for food packaging and films for agriculture
PI	 Nanoelectronics for energy-efficient smart edge devices Strengthening the sustainability and resilience of EU space infrastructure Researchers of any nationality conducting their research in any EU member state or
Eligible	associated country Universities, research organisations, SMEs, start-ups, industrial partners established in an
organisation Target group	EU member state or an associated country. The EIC Pathfinder Challenges support collaborative research and innovation from consortia or proposals from single legal entities established in a Member State or an Associated Country (unless stated otherwise in the specific challenge chapter).
Expected outputs	Open Access (J) reviewed specialist articles; movement of new technology up the TRL scale towards technology development
Call opens	20 Jun 2024
IOCB deadline	Weds 9 Oct 2024 Weds 16 October 2024 17:00 Brussels time
Final deadline Evaluation	Mar 2025
results	IVIGI ZUZU
Signature of agreement	Jun 2025 (indicative)
Earliest date of implementation	Jun/Jul 2025
Latest date of implementation	- None
Sustainability	None
Reporting	one report every 18 months

Project duration (min-max)	Unspecified (usually 36-48 months; 3-4 years)
Allocation for the call	120 M EUR (30 projects)
Project budget (min-max)	Up to 4 M EUR & additional EIC Booster grants of 50 000 EUR to undertake complementary activities to explore potential pathways to commercialisation or for portfolio activities (NEW from 2024: financed as a Lump Sum grant)
Success rate	12.7% (2023), 10.1 % (2022), 9.7 % (2021)
Eligible costs	Direct costs: personnel costs, travel expenses, equipment, goods & services, outsourcing (subcontracting); indirect costs: overheads max 25% of the total eligible direct costs (NEW from 2024: financed as a Lump Sum grant)
Reimbursement	100 %
Mode of funding	Ex-ante
Language of application	English
Provider	European Innovation Council, https://eic.ec.europa.eu/ Frequently asked questions (https://eic.ec.europa.eu/eic-frequently-asked-questions_en#ecl-inpage-321) NCP: Technology Centre CAS, www.tc.cz ; Michaela Vlková: vlkovam@tc.cz , tel. 234 006 262
Call identifier	EIC-PathfinderChallenges-2024
Call info	EIC Pathfinder Challenges grants are top-down grants designed to support the exploration of bold ideas for radically new technologies. It welcomes the high-risk / high gain and interdisciplinary cutting-edge science collaborations that underpin technological breakthroughs that fit thematically into one of the predefined Challenge programmes.
Conditions /	Proposal must be submitted by the coordinator, on behalf of a consortium that includes at
Restrictions	least three independent legal entities, each one established in a different Member State or Associated Country and with at least one of them established in a Member State. The legal entities may for example be universities, research organisations, SMEs, start-ups, industrial partners or natural persons. Sections 1 to 3 of the part B of your proposal, corresponding respectively to the evaluation criteria Excellence, Impact, and Quality and Efficiency of the Implementation, must consist of a maximum of 30 A4 pages. Excess pages will be automatically made invisible, and will not be taken into consideration by the evaluators.
Proposal consists of	On-line application on the Funding&Tenders Portal: https://webgate.ec.europa.eu/cas/login 1) Administrative form (Part A, on-line on the Funding&Tenders Portal): (i) General information: Abstract, Declarations; (ii) Administrative data of participating organisations: Organisation data, Department, Main contact person, Researchers involved in proposal and their career stages, Role of participating organisation, up to 5 publications relevant for call content, up to 5 previous projects, significant infrastructure relevant to proposal, GEP yes/no tickbox,; (iii) Budget – budget table; (iv) Ethics and security issues tables; (v) Other questions (applicant & Project Office) 2) Research proposal (Part B, use template, max 30 A4 pages): (a) Excellence; (b) Impact; (c) Quality and efficiency of the implementation 3) Other documentation (annexes) needed on ethics and security issues, on clinical trials or financial support to third parties, if relevant (Project Office & applicant)
Evaluation criteria	Remote scoring by EIC expert evaluators according to the criteria below. A rebuttal procedure after the remote phase with opportunity to reply with a strict page limit (maximum two A4 pages) to the evaluators' comments, about 1.5-2.5 months after the call deadline. Not to alter or add to the content of the proposals, must strictly focus on responding to potential misunderstandings or errors by the evaluators. Evaluation committee will make a final decision based on the remote evaluators' reports. Excellence (Threshold: 4/5, weight 60%) Objectives and relevance to the Challenge: How clear are the project's objectives? How relevant are they in contributing to the overall goal and the specific objectives of the Challenge? Novelty: To what extent is the proposed work ambitious and goes beyond the state-of-theart? Plausibility of the methodology: How sound is the proposed methodology, including the underlying concepts, models, assumptions, appropriate consideration of the gender dimension in research content, and the quality of open science practices? Impact (Threshold: 3.5/5, weight 20%)

	Potential Impact: How credible are the pathways to achieve the expected outcomes and impacts of the Challenge? To what extent would the successful completion of the project
	contribute to this?
	Innovation potential: How adequate are the proposed measures for protection of results and any other exploitation measures to facilitate future translation of research results into innovations with positive societal, economic or environmental impact? 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?
	Communication and Dissemination: How suitable are the proposed measures, including
	communication activities, to maximise expected outcomes and impacts for raising awareness about the project results' potential to establish new markets and/or address global
	challenges?
	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, timeline, 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 applicant/consortium (depends if mono or multi-beneficiaries): To what extent does the applicant / do all consortium members have the necessary capacity and high quality expertise for performing the project tasks?
Research areas	Aligning with the challenge aims
Call workshop	European Innovation Council online info day 15 Jan 2024, online recording
Call Workshop	(https://eic.ec.europa.eu/events/european-innovation-council-online-info-day-work-
	programme-2024-15-january-2024-2024-01-15 en)
	EIC Pathfinder Challenge Solar-to-X devices information day 20 Mar 2024, online recording
	(https://www.youtube.com/watch?v=dWPuC9L6Mw8)
	EIC Pathfinder Challenge Towards cement and concrete as a carbon sink
	information day 20 Mar 2024, online recording
	(https://www.youtube.com/watch?v=TGBULU62miE)
	EIC Pathfinder Challenge Nature inspired alternatives for food packaging and films for
	agriculture information day 20 Mar 2024, online recording
	(https://www.youtube.com/watch?v=y-YTbQkhf8E)
	EIC Pathfinder Challenge Nanoelectronics for energy-efficient smart edge devices
	information day 20 Mar 2024, online recording
	(https://www.youtube.com/watch?v=q4JjtoINxWM)
	EIC Pathfinder Challenge Strengthening the sustainability and resilience of EU space
	infrastructure information day 20 Mar 2024, online recording
	(https://www.youtube.com/watch?v=nXIH-fUgpzk)
IOCB contact	Please inform the IOCB Project Office about your intention to apply.
	Do not hesitate to contact us anytime for consulting, discussion or help.
	Veronika Palečková, veronika.paleckova@uochb.cas.cz, +420 220 183 266
	Blanka Collis, blanka.collis@uochb.cas.cz, +420 220 183 527
Download	EIC-PathfinderChallenges-2024 summary
documents	EIC 2024 Work programme (pages 27-48 and annexes)
	EIC-PathfinderChallenges-2024 application form
	EIC-PathfinderChallenges-2024 Challenge guide: Solar-to-X devices
	EIC-PathfinderChallenges-2024 Challenge guide: Towards cement and concrete as a carbon sink
	EIC-PathfinderChallenges-2024 Challenge guide: Nature inspired alternatives for food
	packaging and films for agriculture
	EIC-PathfinderChallenges-2024 Challenge guide: Nanoelectronics for energy-efficient smart
	edge devices
	EIC-PathfinderChallenges-2024 Challenge guide: Strengthening the sustainability and
	resilience of EU space infrastructure
	· · · · · · · · · · · · · · · · · · ·