EIC Work Programme 2026

We have categorized the calls from the European Innovation Council (EIC) work programme 2026 according to the impact that microfluidics can have on the projects and related topics. We are sharing our analysis in case it can help you with project funding efforts. And, of course, if our expertise can be of use to you, we would be delighted to discuss it further.

How to read the stars in terms of the % of microfluidic technologies' relevance for the call:

By microfluidic relevance, we mean the relevance of microfluidic technologies to the topic in question. Additionally, we outline key points on how a microfluidic partner could contribute to the topic.

Relevance (%)	90-100	80-89	70-79	60-69	50-59	40-49	30-39	20-29	10-19	0-9
Relevance (*)	*****	****	***	**	*	–	– –	– – –	– – – –	– – – – –

Administrative dates and budgets per call:

- **Pathfinder Open:** 166 M€; grants 4 M€; opening 05/02/2026, deadline 06/05/2026
- **Pathfinder Challenges:** 96 M€; equal-share note; opening 28/07/2025, deadline 28/10/2026
- **Transition Open**: 100 M€; grants 0.5-2.5 M€; opening 22/04/2025, deadline 16/09/2026
- **Advance Innovation Challenges:** 6 M€ in 2026; 25 M€ in 2027; Stage 1 ≤ 0.30; Stage 2 ≤ 2.50; opening 15/11/2025, deadlines 18/03/2026 (Stage 1), 18/06/2027 (Stage 2).
- **Accelerator Open & Challenges:** 414/220 M€, grant ≤ 2.5; investment 1-10; deadlines (2026): 07/01; 04/03; 06/05; 08/07; 02/09; 03/11.
- **STEP:** 300 M€; 10-30 (investment); deadlines (2026): 11/02; 06/05; 09/09; 25/11.

***** **II.2.2 - HORIZON-EIC-2026-PATHFINDERCHALLENGES-01 - BIOTECHNOLOGY FOR HEALTHY AGEING**

- **Type of action:** Research and Innovation Action (RIA; lump sum).
- **Call:** EIC Pathfinder Challenges 2026
- **Budget (M€):** 96 M€ across all three Challenges; approximately equal shares.
- **Expected EU contribution per project:** up to 4.00.

Scientific focus: The Challenge targets breakthroughs that keep people healthier for longer by preventing/delaying disease and functional decline and by enabling earlier, more precise interventions. It explicitly encourages **new approach methodologies (NAMs)** and **microphysiological models** to replace or reduce animal use and to better represent human biology across the lifespan. The text cites organoids and **organ-on-chip** systems as NAMs examples and stresses longitudinal, mechanism-based readouts to capture ageing trajectories and heterogeneity. Expected outcomes include validated human-relevant models and data that translate into more predictive diagnostics/therapies and public-health impact.

Why a microfluidic partner is valuable.

- **Microphysiological systems**: microfluidics SMEs/academic labs can design and fabricate organ-on-chip/ageing-on-chip platforms to model immunosenescence, inflammageing, vascular stiffening, neurodegeneration, and multi-organ crosstalk under controlled gradients and mechanical cues.
- **Human-relevant NAMs**: integrate primary/tissue-engineered cells, perfusion, dynamic shear and barrier functions to produce reproducible, human-specific endpoints aligned with Challenge aims.
- **Assay throughput & analytics**: on-chip multiplexing, single-cell sampling, secretome capture, and real-time sensors reduce cost/time and improve data richness for ageing biomarkers.
- **Standards & translation**: microfluidics entities can contribute to NAMs validation (robustness, inter-lab reproducibility), and regulatory-grade data packages, the Challenge expects.

***** **IV.2 - HORIZON-EIC-2026-AIC-01** - **TRANSLATING DISRUPTIVE NEW APPROACH METHODOLOGIES (NAMS) INTO PRACTICE**

- **Type of action:** RIA (lump sum)
- **Call:** EIC Advanced Innovation Challenges - pilot, Stage 1 in 2026; Stage 2 planned in 2027
- **Budget (M€):** 6 M€ in 2026 across both AIC topics; 25 M€ in 2027 across Stage 2.
- **Expected budget/project:** Stage 1 ≤ 0.30; Stage 2 ≤ 2.50.

Scientific focus: The pilot introduces stage-gated, ARPA-style funding to drive demand-driven deep-tech into **real-world uptake**. Projects co-design use cases with users/regulators and de-risk translation through feasibility (Stage 1) and **user testing at scale** (Stage 2). NAMs translation squarely targets human-relevant models (including organ-on-chip and other microphysiological systems), validation against reference methods, and pathways to adoption in industry/regulation.

Why a microfluidic partner is valuable.

- **Bridge to adoption:** microfluidic organisations provide validated organ-on-chip platforms with SOPs, QC, and inter-lab transferability - essential for regulator/industry uptake.
- **User-centred prototyping:** experience integrating chips into pharma/biotech workflows (automation, readouts, data standards) matches the Challenge's demand-side emphasis.
- **Portfolio synergies:** rapid iteration across materials, channel architectures, sensors, and multi-organ coupling under Programme Manager guidance.
- **Regulatory trajectory:** alignment with NAMs acceptance frameworks (performance, reproducibility, relevance) accelerates "practice" translation.

***** **II.1 - HORIZON-EIC-2026-PATHFINDEROPEN-01**

- **Type of action:** RIA (lump sum; funding rate 100%).
- **Call:** EIC Pathfinder Open 2026.
- **Budget (M€):** 166 M€.
- **Expected budget/ project:** up to 4.00.

Scientific focus: Open, high-risk/exploratory research to establish proof-of-principle for breakthrough technologies (start TRL≈1-2 → TRL 3-4). Interdisciplinary consortia are expected; portfolio management and BAS/Booster instruments support follow-on (Transition/Accelerator).

Why a microfluidic partner is valuable.

- Microfluidics enables **novel modalities** (organs-on-a chip, single-cell processing, lab-on-chip diagnostics, microreactors) that align with Pathfinder's "deep-tech" ambition.
- Rapid iteration in **chip design/fabrication** (polymer/advanced materials; soft lithography; hybrid integration) supports radical concepts and proof-of-principle at low scale/time cost.
- Clear exit routes via EIC **Transition** and **Accelerator** suit microfluidic inventions that need translation and scale-up.

**** **III - HORIZON-EIC-2026-TRANSITIONOPEN-01-01**

- **Type of action:** RIA (lump sum; 100% funding).
- **Call:** EIC Transition 2026 (Open).
- **Budget (M€):** 100 M€.
- **Expected budget/project:** 0.5-2.5

Scientific focus: Translates eligible base-project results (EIC Pathfinder, ERC PoC, Pillar II RIAs, etc.) from proof-of-concept (TRL 3-4) to validated tech in relevant environments (TRL 5-6), and develops business/market readiness. Single entities (SMEs/RPOs) or small consortia (2-5).

Why a microfluidics partner is valuable.

- Many microfluidic outputs from Pathfinder/ERC PoC need **application validation** (clinical, bioprocess, environmental), **industrial design**, and **regulatory readiness** - Transition funds will exactly cover these steps.
- Microfluidics entities can lead to **design for manufacturing** (injection moulding, bonding, QC), **automation**, **biocompatibility**, and **standards** to achieve TRL 5-6.
- Consortia can combine chip makers, assay owners, and end-users to package IP, access users, and prepare **Fast Track** to Accelerator.

**** **V.2.3 - BIOTECH FOR REGENERATING AGRICULTURAL SOILS**

- **Type of action:** EIC Accelerator grant + equity (blended) / grant-only / equity-only. Grant ≤ 2.5 M€; investment 1-10 M€.

- **Call:** EIC Accelerator Challenges 2026.
- **Budget (M€):** Challenges total 220 M€ across five areas.
- **Expected budget/project:** grant ≤ 2.5; investment 1-10.

Scientific focus: Targets deep-tech solutions that **restore soil health** and resilience across food/feed/biomass systems, reversing biodiversity loss and pollution while boosting EU competitiveness. Expected outcomes: Scalable biotech and other deep-tech innovations delivering measurable soil-function gains and sustainable yields.

Why a microfluidic partner is valuable.

- **Soil-on-chip/ecosystem-on-chip** for ex-situ screening of microbial consortia, bio-stimulants, and root-microbiome interactions under controlled gradients (moisture, nutrients, pollutants).
- **High-throughput screening** of engineered microbes/enzymes for carbon sequestration, bio-remediation, or nutrient cycling; micro-bioreactors for adaptive evolution.
- **Field-deployable sensors** (lab-on-a chip for emerging pollutants, pathogens, or metabolite profiling) to monitor intervention efficacy.
- Microfluidics SME could be a **co-applicant** (if ready for TRL 6-8) or technology supplier for a soil-biotech lead.

**** V.2.5 - DEEP TECH FOR CLIMATE ADAPTATION**

- **Type of action:** EIC Accelerator
- **Call:** EIC Accelerator Challenges 2026
- **Budget (M€):** 220 M€ across five Challenges.
- **Expected budget/ project:** grant ≤ 2.5; investment 1-10.

Scientific focus: Backs startups/SMEs scaling **adaptation** solutions: urban heat mitigation, **climate-smart agriculture** (including microbial/biological approaches), **water scarcity** (reuse/filtration sensitive to emerging pollutants), and flood/coastal protection; links innovators to regions/cities via BAS/innovation procurement.

Why a microfluidic partner is valuable.

- **Water-quality lab-on-chip** for rapid detection of PFAS, microplastics, pathogens, and **emerging pollutants** in reuse systems.
- **On-farm microfluidic analytics** for soil moisture, salinity, and nutrient flux; micro-bioreactors for beneficial microbe formulations.
- **Biosensing networks**: low-power microfluidic cartridges integrated with IoT to inform adaptive management; complements adaptation priorities.

*** IV.1 - HORIZON-EIC-2026-AIC-01 - ACCELERATING PHYSICAL AI: EMBODIED INTELLIGENCE FOR THE NEXT FRONTIER OF AI-POWERED ROBOTICS**

- **Type of action:** Stage 1 & Stage 2 are RIAs
- **Call:** AIC pilot, Stage 1 in 2026; Stage 2 planned in 2027.
- **Budget (M€):** 6 M€ in 2026 across both AIC topics; 25 M€ in 2027 across Stage 2.
- **Expected budget/ project:** Stage 1 ≤ 0.30; Stage 2 ≤ 2.50.

Scientific focus: Drives embodied AI in robotics by validating disruptive approaches, then scaling a subset in Stage 2 via user-testing. Emphasizes integrated hardware/software stacks, sensing/actuation, learning & control, and application-driven benchmarking.

Why a microfluidic partner is valuable.

- **Soft microfluidic actuators/valves** and pneumatic/hydraulic microsystems enable compliant, bio-inspired robotic components aligned with “physical AI”.
- **On-chip sensing** (flow, pressure, chem/bio) for autonomous environmental or biomedical robots.
- **Rapid fabrication** (moulding/lamination of elastomers and polymers) to iterate robot morphologies.

***II.2.1 - HORIZON-EIC-2026-PATHFINDERCHALLENGES-01- ADVANCED MATERIALS FOR MINIATURISED ENERGY HARVESTING SYSTEMS**

- **Type of action:** RIA (lump sum).
- **Call:** EIC Pathfinder Challenges 2026.
- **Budget (M€):** 96 M€ across three Challenges; approx. equal shares.
- **Expected budget/ project:** up to 4.00.

Scientific focus: Calls for **advanced materials** enabling **miniaturized energy harvesters** (solar, thermoelectric, piezo/tribo, EM-wave, etc.) integrated into autonomous wireless sensors/IoT, benchmarking lab-scale use cases to TRL 4 while reducing CRM's use.

Why a microfluidic partner is valuable.

- **Microfabrication & integration:** polymer microfabrication and thin-film processes used in microfluidic chips translate to **micro-harvester module manufacture** and packaging.
- **System-on-chip**: expertise in joining micro-structures, channels, and sensors helps integrate harvesters with low-power sensor nodes, fluidic cooling, or self-powered **biosensors**.
- **Benchmarking rigs:** microfluidic testbeds to apply controlled thermal/flow/mechanical stimuli for harvester characterization, matching Challenge's benchmarking priority.

***V.1 - EIC ACCELERATOR OPEN**

- **Type of action:** EIC Accelerator grant + equity / grant-only / equity-only
- **Call:** EIC Accelerator Open 2026
- **Budget (M€):** 414 M€ (165 M€ grant / 249 M€ equity).
- **Expected budget/ project:** grant ≤ 2.5; investment 1-10; 70% grant co-funding; investment terms via EIC Fund.

Scientific focus: Supports single startups/SMEs with high-risk innovations (TRL 6-8) towards **market deployment & scale-up**, via blended finance and BAS.

Why a microfluidic partner is valuable.

- **Lab-to-fab** transition for diagnostic chips, organ-on-chip instruments, micro-bioprocessing; aligns with TRL 6-8 needs (verification, validation, regulatory/quality, supply chain).

- While not a consortium RIA, **microfluidic SMEs** can apply directly; partnerships with assay owners/clinics/industrial users strengthen market traction.

***V.2.1 - ADVANCED MATERIALS FOR RENEWABLE ENERGY AND ENERGY STORAGE SYSTEMS**

- **Type of action:** EIC Accelerator
- **Call:** EIC Accelerator Challenges 2026.
- **Budget (M€):** 220 M€ across Challenges.
- **Expected budget / project:** grant ≤ 2.5; investment 1-10.

Scientific focus: Scales **advanced materials** for energy generation (e.g., PV, wind) and **mid-/long-duration storage**, with strong sustainability/circularity metrics and reduced CRMs.

Why a microfluidic partner is valuable.

- **Materials discovery**: microfluidic reactors for combinatorial synthesis and rapid screening (electrolytes, coatings, nano-materials).
- **Thermal management/encapsulation** skills from lab-on-chip translate to **module packaging** and reliability testing frameworks.

-VI - EIC STRATEGIC TECHNOLOGIES FOR EUROPE PLATFORM (STEP) SCALE UP CALL

- **Call:** STEP Scale Up 2026 (one batch per quarter).
- **Budget (M€):** 300 M€ (2026).
- **Expected budget/ project (M€):** Investment via EIC Fund (10-30 M€) to catalyze rounds of 50-150 M€ (3-5× leverage), targeting digital/deep-tech, clean/resource-efficient (incl. net-zero) and biotechnologies.

Scientific focus: Scale-up financing for strategic technologies (including biotech), complementing the Accelerator; the same indirect management provisions as the Accelerator apply to the investment component.

Why a microfluidic partner is valuable.

- Suitable for **late-TRL microfluidics** firms (manufacturing lines, regulatory approvals, global deployment of instruments/cartridges).
- Not a consortium RIA; relevant when the microfluidics SME is ready to scale commercially.

- -V.2.4 - BOOSTING THE EUROPEAN CRITICAL RAW MATERIALS VALUE CHAIN

- **Type of action:** EIC Accelerator
- **Call:** EIC Accelerator Challenges 2026.
- **Budget (M€):** 220 across Challenges.
- **Expected budget / project:** grant ≤ 2.5; investment 1-10.

Scientific focus: Seeks deep-tech innovations across **exploration → extraction → refining → recycling** to meet Critical Raw Materials Act benchmarks; includes bioleaching, phytomining, and advanced separation to improve EU strategic autonomy.

Why a microfluidic partner is valuable

- **Microreactors** for intensified hydrometallurgy/biometallurgy; **on-chip separations** (membrane/μ-electrophoresis) for rapid feedstock characterization; **inline sensing** for process control.

- -II.2.3 - HORIZON-EIC-2026-PATHFINDERCHALLENGES-01 - DEEPRAP: DEEP REASONING, ABSTRACTION & PLANNING TOWARDS TRUSTWORTHY COGNITIVE AI SYSTEMS

- **Type of action:** RIA (lump sum).
- **Call:** EIC Pathfinder Challenges 2026
- **Budget (M€):** 96 M€ across Challenges.
- **Expected budget / project:** up to **4.00**.

Scientific focus: Aims to achieve **human-like cognitive capacities** (reasoning, abstraction, planning) via hybrid symbolic-subsymbolic AI, better training regimes, new evaluation of generalization/robustness, and hardware–software stacks; with attention to trust, safety, and explainability.

Why a microfluidic partner is valuable

- Microfluidics can serve as **complex physical testbeds** for AI-driven scientific discovery (closed-loop experiment design, active learning, robotic pipetting on-chip), but fit is indirect relative to core AI goals.

- - - -V.2.2 - ALTERNATIVE CONCEPTS & KEY ENABLING TECHNOLOGIES FOR FUSION POWER PLANTS

- **Type of action:** EIC Accelerator
- **Disclaimer:** evaluated in the last two 2026 batches (02/09 & 03/11).
- **Call:** EIC Accelerator Challenges 2026.
- **Budget (M€):** 220 M€ across Challenges.
- **Expected budget / project:** grant ≤ 2.5; investment 1-10.

Scientific focus: Supports fusion startups/SMEs on **alternative reactor concepts** (magnetic/inertial/magneto-inertial), **advanced materials** for extreme environments, tritium cycle, high-power lasers, plasma components, magnets, and **digital twins/AI**.

Why a microfluidic partner is valuable

- Limited fit; niche contributions (e.g., micro-cooling/micro-channel thermal management or materials screening reactors) are possible but peripheral to core fusion tech.

Notes for your team

Consortia vs single-applicant: Only **Pathfinder (Open & Challenges)**, **Transition**, and **AIC** are **consortium-friendly** R&I actions. **Accelerator** and **STEP** are primarily **single-company** instruments (though partnering suppliers/end-users helps). This matters if you aim to join a consortia.
