

New European Bauhaus Facility (NEB) 2026-2027

We have categorized the calls from the work programme of the New European Bauhaus Facility NEB 2026-2027 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.



New European Bauhaus
beautiful | sustainable | together



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 per call:

HORIZON-NEB-2026-01-PARTICIPATION, 2026-01-REGEN, 2026-01-BUSINESS: Opening 05 May 2026, deadline 01 Dec 2026

HORIZON-MISS-2026-04-CIT-NEB-B4P-CCRI-03: Opening 04 Feb 2026, deadline 08 Oct 2026

HORIZON-NEB-2027-01-PARTICIPATION, 2027-01-REGEN, 2027-01-BUSINESS: Opening 05 May 2027, deadline 01 Dec 2027

HORIZON-NEB-2027-02-NEB-SOIL-01: Opening 05 May 2027, deadline 10 Nov 2027

HORIZON-MISS-2027-07-CLIMA-CIT-NEB-01: Opening 09 Feb 2027, deadline 16 Sep 2027

**** HORIZON-NEB-2026-01-REGEN-01 - SUSTAINABLE, INCLUSIVE, AFFORDABLE AND BEAUTIFUL SOLUTIONS FOR THERMAL COMFORT IN BUILDINGS**

Type of action: IA

Call: Beautiful, inclusive and sustainable neighbourhoods for communities

Budget (topic, M€): 12.00, Expected EU contribution per project: 4.00, #projects: 3

- **Topic focus**
 - Develop and demonstrate solutions that improve **thermal comfort** while aligning with NEB principles (sustainable, user-centred, place-based).
 - **Why a microfluidic entity fits**
 - Micro-structured heat exchangers (microchannels) and **fluidic thermal control layers** integrated into façade or ceiling panels for high surface-area heat transfer.
 - **On-chip thermal sensing** networks to map occupant-level comfort (temperature/humidity gradients) with minimal energy use.
 - **Passive radiative cooling skins** and micro-textured surfaces tested in climate chambers using microfluidic flow control.
 - **Rapid prototyping** of liquid-circulation components (manifolds, valves) in polymer, aligned with NEB's emphasis on affordability and circularity.
 - In situ **LCA-ready measurement** packages (heat flux, moisture) to quantify life-cycle impacts of envelope innovations.
-

**** HORIZON-NEB-2027-01-REGEN-02 - SUSTAINABLE, BEAUTIFUL AND HEALTHY CONSTRUCTION AND RENOVATION SITES**

Type of action: RIA

Call: Innovative models for neighbourhoods that integrate beauty, inclusiveness and sustainability

Budget (topic, M€): 8.00, Expected/project (M€): 4.00, #projects: 2

- **Topic focus**
 - Assess and reduce **noise, dust, water contamination, vibration** and visual disturbance from construction/renovation sites.
 - Develop ≥ 2 **validated solutions** with quantified indicators and draft a **European Charter** for environmental and working-environment management of sites.
 - **Why a microfluidic entity fits**
 - **Lab-on-chip aerosol/particulate samplers** (silica, PM) and **portable micro-GC/ μ CE** modules for VOCs for on-site exposure mapping.
 - **Sweat-patch microfluidic biosensors** to non-invasively monitor dehydration/heat stress of workers (health & well-being outcome).
 - **Microfluidic water-quality test kits** for site runoff (pH, heavy metals, turbidity) that return results in minutes.
 - Distributed, low-power **microfluidic air-sampling nodes** enabling dense spatial monitoring during mitigation trials.
-

**** HORIZON-NEB-2026-01-REGEN-02 - ADVANCING SUSTAINABLE MAINTENANCE AND REPAIR MEASURES FOR EXISTING BUILDINGS**

Type of action: IA

Call: Beautiful, inclusive and sustainable neighbourhoods for communities

Budget (topic, M€): 10.00, Expected/project: 5.00, #projects: 2

- **Topic focus**
 - Develop **prospective LCA-based decision tools** for **predictive maintenance**; create packages of measures integrating circularity, low disruption and compliance.
 - **Demonstrate on three buildings** (incl. one heritage), identify barriers and solutions for widespread application.
 - **Why a microfluidics entity fits**
 - **Embedded microfluidic leak/moisture sensors** for early detection in façades/roofs; micro-impedance humidity probes for wood/concrete.
 - **Self-healing coatings** using microfluidic emulsification to fabricate microcapsules for crack-sealing resins.
 - **Thin-film microfluidic NDT heads** for chloride/ion migration or carbonation front assessment in concrete.
 - **Plug-and-play condition-monitoring kits** that minimise user disruption, aligned with the topic's low-disturbance requirement.
-

*** HORIZON-MISS-2027-07-CLIMA-CIT-NEB-01 - URBAN NATURE: SUPPORTING RESTORATION OF URBAN ECOSYSTEMS, ALONG URBAN TRANSPORT NETWORKS AND IN THE BUILT ENVIRONMENT**

Type of action: IA

Call: Joint Call between the Climate-Neutral & Smart Cities Mission and the Adaptation to Climate Change Mission

Budget (topic, M€): 40.00, Expected/project: 10.00, #projects: 4

- **Topic focus**
 - Large-scale **urban nature restoration** along transport networks and built fabric; multi-city consortia; **IA** implementation scale.
 - **Why a microfluidics entity fits**
 - **eDNA-on-chip** biodiversity monitoring in stormwater and green corridors.
 - **Microfluidic nutrient and pollutant assays** for rain-garden/green-roof performance.
 - Compact **microfluidic hydrology sensors** for infiltration/retention validation in nature-based solutions.
-

*** HORIZON-NEB-2027-01-REGEN-03 - REVITALISING NEIGHBOURHOODS AROUND EXISTING RAILWAY AND MOTORWAY CORRIDORS**

Type of action: IA

Call: Innovative models for neighbourhoods that integrate beauty, inclusiveness and sustainability

Budget (topic, M€): 11.00, Expected/project: 5.50, #projects: 2

- **Topic focus**
 - TRL 6-8 **IA** pilots to re-stitch neighbourhoods severed by linear infrastructure; reduce environmental/health impacts.
 - **Why a microfluidics entity fits**
 - **Dense air-quality micro-labs** (NO_x, VOCs, ultrafines) for hotspot mapping near corridors.
 - **On-chip water-pollutant sensors** for runoff treatment swales/basins.
 - **Citizen kits** leveraging microfluidic strips for participatory monitoring aligned with NEB's inclusion goals.
-

*** HORIZON-NEB-2027-02-NEB-SOIL-01 - REDUCING SOIL SEALING THROUGH SUSTAINABLE URBAN AND TERRITORIAL DESIGN IN THE NEW EUROPEAN BAUHAUS**

Type of action: IA

Call: Joint Call between the NEB Facility and the Soil Deal for Europe Mission

Budget (topic, M€): 15.00, Expected/project: 7.50, #projects: 2

- **Topic focus**
 - **IA** actions to limit **soil sealing**, prioritise permeable/green design; JRC may join as zero-funding beneficiary/associated partner.
 - **Why a microfluidics entity fits**
 - **Microfluidic soil-moisture and permeability probes** for rapid field assessment.
 - **On-chip nutrient/pathogen tests** to evaluate quality of infiltrated water.
 - **eDNA microfluidics** to track soil biodiversity before/after de-sealing.
-

*** HORIZON-NEB-2026-01-REGEN-03 - INNOVATIVE SOLUTIONS FOR THE SUSTAINABLE AND BEAUTIFUL USE OF VERTICAL SPACE**

Type of action: IA

Call: Beautiful, inclusive and sustainable neighbourhoods for communities

Budget (topic, M€): 15.00, Expected/project: 5.00, #projects: 3

- **Topic focus**
 - Demonstrate **innovative uses of roof/airspace** (e.g., vertical extensions, rooftop green/food systems) with circularity, LCA of impacts, co-creation and regulatory feasibility.
 - **Why a microfluidics entity fits**
 - **Micro-irrigation / fertigation** controllers and plant-on-chip sensors for rooftop gardens/urban farming.
 - **Lightweight microfluidic heat-exchange panels** for compact energy/comfort retrofits in vertical add-ons.
 - **Rapid environmental sensing** kits to quantify densification trade-offs (air, water, biodiversity).
-

*** HORIZON-NEB-2027-01-REGEN-01 - COMBINING CONVENTIONAL AND INNOVATIVE CONSTRUCTION MATERIALS, PRODUCTS AND TECHNIQUES FOR A SUSTAINABLE AND BEAUTIFUL BUILT ENVIRONMENT**

Type of action: RIA

Call: Innovative models for neighbourhoods that integrate beauty, inclusiveness and sustainability

Budget (topic, M€): 12.00, Expected/project: 4.00, #projects: 3

- **Topic focus**
 - RIA (TRL 4-5) to integrate **innovative with conventional** materials/techniques, advancing circular, low-impact solutions consistent with standards/regulation.
 - **Why a microfluidics entity fits**
 - **Micro-textured surfaces** for passive cooling/anti-fouling or condensate management.
 - **Microfluidic fabrication** of emulsions/foams and **bio-based binders** for composites.
 - **On-chip durability tests** (salt-spray microreactors, micro-permeation cells) feeding material screening.
-

*** HORIZON-NEB-2026-01-PARTICIPATION-03 - UNDERSTANDING INHABITANT'S EXPERIENCES OF NEIGHBOURHOODS TO SUPPORT THEIR HEALTH AND WELL-BEING**

Type of action: RIA

Call: Beautiful, inclusive and sustainable neighbourhoods for communities

Budget (topic, M€): 15.00, Expected/project: 5.00, #projects: 3

- **Topic focus**
 - RIA to **measure, analyse and translate** inhabitants' experiences for healthier, more inclusive neighbourhoods.
 - **Why a microfluidics entity fits**
 - **Wearable or patch-based microfluidic** sensors to study heat stress, sweat electrolytes and hydration in public spaces.
 - **Portable on-chip exposome** assays (air/water) linking environments with health endpoints.
 - **Citizen-science micro-kits** enabling inclusive data collection for design feedback.
-

*** HORIZON-NEB-2027-01-PARTICIPATION-03 - NOVEL COMBINATIONS OF KNOWLEDGE AND RESEARCH METHODS TO ADDRESS SOCIAL ISSUES AND ADVANCE A FAIR GREEN TRANSITION OF NEIGHBOURHOODS**

Type of action: RIA

Call: Innovative models for neighbourhoods that integrate beauty, inclusiveness and sustainability

Budget (topic, M€): 14.00, Expected/project: 3.50, #projects: 4

- **Topic focus**
 - RIA to **combine methods** across design/SSH/science/technology for social challenges in the green transition at neighbourhood scale.
- **Why a microfluidics entity fits**

- **Hybrid methods:** combine ethnography with **on-chip environmental diagnostics** to connect perceived and measured exposures.
- Demonstrate **inclusive sensing** campaigns co-designed with residents (schools, seniors).

— **HORIZON-NEB-2027-01-BUSINESS-01 - MASS CUSTOMISATION OF OFFSITE MANUFACTURED MODULAR CONSTRUCTION COMPONENTS TO TRANSFORM THE EXISTING BUILT ENVIRONMENT**

Type of action: IA

Call: Innovative models for neighbourhoods that integrate beauty, inclusiveness and sustainability

Budget (topic, M€): 10.00, Expected/project: 5.00, #projects: 2

- **Topic focus**
 - Develop & **demonstrate** solutions for **customising offsite mass-manufactured modules**; apply BIM, distributed manufacturing; validate across ≥3 applications/countries; evaluate environmental/social/cultural value and scalability.
- **Why a microfluidics entity fits**
 - **Drop-in microfluidic thermal panels** or **embedded sensing** (leak detection, humidity) as optional module variants.
 - **Rapid polymer microfabrication** to customise module inserts for different climates/uses.

— **HORIZON-NEB-2026-01-PARTICIPATION-02 - INNOVATIVE APPROACHES FOR THE SPATIAL DESIGN OF NEIGHBOURHOODS**

Type of action: IA

Nom du call: Beautiful, inclusive and sustainable neighbourhoods for communities

Budget (topic, M€): 10.50, Expected/project: 3.50, #projects: 3

- **Topic focus**
 - Demonstrate **methods that integrate user perspectives** in spatial design and deliver social/cultural/environmental value.
- **Why a microfluidics entity fits**
 - **Environmental micro-sensing** (air/water/noise) to inform design trade-offs; **fast prototyping** of interactive urban furniture with embedded sensing supporting place-based evaluation.

— — **HORIZON-MISS-2026-04-CIT-NEB-B4P-CCRI-03 - INTRODUCING CIRCULAR ECONOMY MODELS IN THE CONSTRUCTION SECTOR, FROM BUILDINGS TO CITY SCALE**

Type of action: IA

Call: Supporting the implementation of the Climate-Neutral and Smart Cities Mission

Budget (topic, M€): 47.50, Expected/project: 9.50, #projects: 5

- **Topic focus**
 - Large-scale **circular economy models** in construction; strong city implementation orientation.
 - **Why a microfluidics entity fits**
 - **Process-intensified manufacturing** of bio-based additives using microreactors; **quality-control micro-assays** for recycled materials; contributions are supportive rather than core.
-

— — **HORIZON-NEB-2026-01-BUSINESS-03 - APPROACHES TO REUSE VACANT, OBSOLETE AND UNDERUTILISED SPACES FOR NEIGHBOURHOOD COMMUNITIES**

Type of action: RIA

Call: Beautiful, inclusive and sustainable neighbourhoods for communities

Budget (topic, M€): 9.00, Expected/project: 4.50, #projects: 2

- **Topic focus**
 - Assess needs, co-create reuse processes, identify funding/financing, validate in ≥3 neighbourhoods, quantify social/cultural/environmental/economic benefits.
 - **Why a microfluidics entity fits**
 - Provide **STEM-maker reuse** concepts (e.g., pop-up micro-labs for citizen monitoring) and **environmental testing** kits to derisk re-occupancy.
-

— — **HORIZON-NEB-2027-01-PARTICIPATION-01 - THE TRANSFORMATIVE POTENTIAL OF CO-GOVERNANCE IN THE GREEN TRANSITION OF NEIGHBOURHOODS**

Type of action: IA

Call: Innovative models for neighbourhoods that integrate beauty, inclusiveness and sustainability

Budget (topic, M€): 10.72, Expected/project: 5.36, #projects: 2

- **Topic focus**
 - Demonstrate **co-governance** approaches and multi-actor engagement to accelerate green transition decisions at neighbourhood scale.
 - **Why a microfluidics entity fits**
 - Contribute **evidence platforms** (community sensing data) to support deliberation and outcome tracking; role is facilitative.
-

— — — **HORIZON-NEB-2027-01-PARTICIPATION-02 - INTERGENERATIONAL NEIGHBOURHOODS AND COMMUNITIES ALIGNED WITH THE NEW EUROPEAN BAUHAUS**

Type of action: IA

Call: Innovative models for neighbourhoods that integrate beauty, inclusiveness and sustainability

Budget (topic, M€): 10.50, Expected/project: 5.25, #projects: 2

- **Topic focus**
 - Demonstrate **methods and solutions** to identify and improve **intergenerational** character of neighbourhoods; IA with lump-sum.

- **Why a microfluidics entity fits**
 - Minor: **simple environmental micro-sensing** to compare age-specific exposure profiles (playgrounds vs. senior routes).
-

— — — **HORIZON-NEB-2026-01-PARTICIPATION-01 - ADDRESSING HOMELESSNESS THROUGH HOUSING-LED APPROACHES ALIGNED WITH THE NEW EUROPEAN BAUHAUS**

Type of action: IA

Call: Beautiful, inclusive and sustainable neighbourhoods for communities

Budget (topic, M€): 12.90, Expected/project: 4.30, #projects: 3

- **Topic focus**
 - **Housing-led** interventions and services to reduce homelessness; align design with NEB values; neighbourhood-level implementation.
 - **Why a microfluidics entity fits**
 - Peripheral: **air/water quality kits** for shelters and temporary housing; training packages for community monitoring.
-

— — — **HORIZON-NEB-2026-01-BUSINESS-01 - STRUCTURALLY ADDRESSING HOMELESSNESS THROUGH INTEGRATED SOCIAL INFRASTRUCTURE AND SERVICES IN NEIGHBOURHOODS**

Type of action: IA

Call: Beautiful, inclusive and sustainable neighbourhoods for communities

Budget (topic, M€): 10.50, Expected/project: 3.50, #projects: 3

- **Topic focus**
 - System-based integration of **social infrastructure/services**; validate approach across **≥5 countries**; develop recommendations.
 - **Why a microfluidics entity fits**
 - Limited: provide **low-cost health/environment monitoring** (IAQ, water) to inform design of social infrastructure.
-

— — — **HORIZON-NEB-2026-01-BUSINESS-02 - UNDERSTANDING CAPITAL MARKET DYNAMICS FOR INCREASED INVESTMENT IN NEW EUROPEAN BAUHAUS PROJECTS IN NEIGHBOURHOODS**

Type of action: RIA

Call: Beautiful, inclusive and sustainable neighbourhoods for communities

Budget (topic, M€): 7.00, Expected/project: 3.50, #projects: 2

- **Topic focus**
 - Analyse **demand/supply** sides of capital; develop **≥2 investment solutions** (e.g., place-based impact investing; digital financial instruments).
 - **Why a microfluidics entity fits**
 - Minor role: provide **impact-measurement data streams** (from sensors) to underpin outcome-based finance KPIs.
-

— — — — **HORIZON-NEB-2027-01-BUSINESS-02 - INNOVATIVE MODELS FOR COLLECTIVE COMMUNITY INVESTMENT AND OWNERSHIP**

Type of action: RIA

Call: Innovative models for neighbourhoods that integrate beauty, inclusiveness and sustainability

Budget (topic, M€): 10.50, Expected/project: 3.50, #projects: 3

- **Topic focus**
 - Design and test **community investment/ownership** models for NEB projects.
 - **Why a microfluidics entity fits**
 - Very limited: provide **evidence dashboards** (sensing-derived) to support community investment narratives.
-

— — — — **HORIZON-NEB-2027-01-BUSINESS-03 - ANTICIPATING THE LONG-TERM FUTURE OF NEIGHBOURHOODS IN LINE WITH THE NEW EUROPEAN BAUHAUS**

Type of action: RIA

Call: Innovative models for neighbourhoods that integrate beauty, inclusiveness and sustainability

Budget (topic, M€): 7.00, Expected/project: 3.50, #projects: 2

- **Topic focus**
 - **Participatory foresight**: analyse long-term drivers, co-create scenarios/visions, validate approach in ≥3 countries.
- **Why a microfluidics entity fits**
 - Tangential: contribute **quantitative environmental baselines** (sensor data) to inform foresight exercises.