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Annex XIV

Horizon Europe

Work Programme 2026-2027

14. Horizontal Activities

DISCLAIMER

This draft has not been adopted or endorsed by the European Commission. Any views expressed are the preliminary views of the Commission services and may not in any circumstances be regarded as stating an official position of the Commission. The information transmitted is intended only for the Member State or entity to which it is addressed for discussions and may contain confidential and/or privileged material.

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Calls for proposals

Call - R&I in Support of the Clean Industrial Deal

HORIZON-CID-2026-01

Overview of this call¹

<u>Proposals are invited against the following Destinations and topic(s):</u>

Topics	Type of Action	Budgets (EUR million) 2026	Expected EU contribution per project (EUR million) ²	Indicative number of projects expected to be funded
Opening: 18				
Deadline(s): 1 Horizontal call - R&I in Support of the Clean Inc	-			
HORIZON-CID-2026-01-01: R&I in Support of the Clean Industrial Deal: Decarbonisation of energy intensive industries (IA) (Processes4Planet and Clean Steel partnerships)	IA	125.00	15.00 to 25.00	8
HORIZON-CID-2026-01-02: R&I in Support of the Clean Industrial Deal: Clean Technologies for Climate Action	IA	150.00	15.00 to 25.00	8
Overall indicative budget		275.00		

General conditions relating to this call						
Admissibility conditions	The	conditions	are	described	in	General

The Director-General responsible for the call may decide to open the call up to one month prior to or after the envisaged date(s) of opening.

The Director-General responsible may delay the deadline(s) by up to two months.

All deadlines are at 17.00.00 Brussels local time.

The budget amounts are subject to the availability of the appropriations provided for in the general budget of the Union for 2026 and 2027.

Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.

	Annex A.
Eligibility conditions	The conditions are described in General Annex B.
Financial and operational capacity and exclusion	The criteria are described in General Annex C.
Award criteria	The criteria are described in General Annex D.
Documents	The documents are described in General Annex E.
Procedure	The procedure is described in General Annex F.
Legal and financial set-up of the Grant Agreements	The rules are described in General Annex G.

Call - R&I in Support of the Clean Industrial Deal

HORIZON-CID-2027-01

Overview of this call³

Proposals are invited against the following Destinations and topic(s):

Topics	Type of Action	Budgets (EUR million)	Expected EU contribution	Indicative number of
		2027	per project (EUR million) ⁴	projects expected to be funded
Opening: 12	Jan 2027	1		
Deadline(s): 15 Sep 2027				
Horizontal call - R&I in Support of the Clean Industrial Deal				

The Director-General responsible for the call may decide to open the call up to one month prior to or after the envisaged date(s) of opening.

All deadlines are at 17.00.00 Brussels local time.

The budget amounts are subject to the availability of the appropriations provided for in the general budget of the Union for 2026 and 2027.

The Director-General responsible may delay the deadline(s) by up to two months.

Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.

HORIZON-CID-2027-01-01: R&I in Support of the Clean Industrial Deal: Decarbonisation of energy intensive industries (IA) (Processes4Planet and Clean Steel partnerships)	IA	125.00	15.00 to 25.00	8
HORIZON-CID-2027-01-02: R&I in Support of the Clean Industrial Deal: Clean Technologies for Climate Action	IA	140.00	15.00 to 25.00	8
Overall indicative budget		265.00		

General conditions relating to this call	
Admissibility conditions	The conditions are described in General Annex A.
Eligibility conditions	The conditions are described in General Annex B.
Financial and operational capacity and exclusion	The criteria are described in General Annex C.
Award criteria	The criteria are described in General Annex D.
Documents	The documents are described in General Annex E.
Procedure	The procedure is described in General Annex F.
Legal and financial set-up of the Grant Agreements	The rules are described in General Annex G.

Call - AI in Science

HORIZON-RAISE-2026-01

Overview of this call⁵

<u>Proposals are invited against the following Destinations and topic(s):</u>

The Director-General responsible for the call may decide to open the call up to one month prior to or after the envisaged date(s) of opening.

The Director-General responsible may delay the deadline(s) by up to two months.

All deadlines are at 17.00.00 Brussels local time.

The budget amounts are subject to the availability of the appropriations provided for in the general budget of the Union for 2026 and 2027.

Topics	Type of Action	Budgets (EUR million) 2026	Expected EU contribution per project (EUR million) ⁶	Indicative number of projects expected to be funded
Opening: 06 Jan 2026 Deadline(s): 21 Apr 2026 Horizontal call - AI in science				
HORIZON-RAISE-2026-01-01: Thematic Networks of Excellence for AI in Science (RAISE pilot) (RIA)	RIA	15.00	Around 15.00	1
HORIZON-RAISE-2026-01-02: Thematic Networks of Excellence for AI in Science – Agriculture and Environment (RAISE pilot)	RIA	13.00	Around 13.00	1
Overall indicative budget		28.00		

General conditions relating to this call	
Admissibility conditions	The conditions are described in General Annex A.
Eligibility conditions	The conditions are described in General Annex B.
Financial and operational capacity and exclusion	The criteria are described in General Annex C.
Award criteria	The criteria are described in General Annex D.
Documents	The documents are described in General Annex E.
Procedure	The procedure is described in General Annex F.
Legal and financial set-up of the Grant Agreements	The rules are described in General Annex G.

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Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.

Call - AI in Science

HORIZON-RAISE-2027-01

Overview of this call⁷

<u>Proposals are invited against the following Destinations and topic(s):</u>

Topics	Type of Action	Budgets (EUR million)	Expected EU contribution per project (EUR million) ⁸	Indicative number of projects expected to be
			mmon	funded
Opening: 22	Sep 2026			
Deadline(s): 02 Feb 2027				
Horizontal call - AI in science				
HORIZON-RAISE-2027-01-01: Automated Scientific Discovery (RAISE pilot) (RIA)	RIA	30.00	Around 10.00	3
HORIZON-RAISE-2027-01-02: Automated Scientific Discovery – Food (RAISE pilot)	RIA	3.00	Around 3.00	1
Overall indicative budget		33.00		

General conditions relating to this call	
Admissibility conditions	The conditions are described in General Annex A.
Eligibility conditions	The conditions are described in General Annex B.
Financial and operational capacity and exclusion	The criteria are described in General Annex C.

The Director-General responsible for the call may decide to open the call up to one month prior to or after the envisaged date(s) of opening.

The Director-General responsible may delay the deadline(s) by up to two months.

All deadlines are at 17.00.00 Brussels local time.

The budget amounts are subject to the availability of the appropriations provided for in the general budget of the Union for 2026 and 2027.

Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.

Award criteria	The criteria are described in General Annex D.
Documents	The documents are described in General Annex E.
Procedure	The procedure is described in General Annex F.
Legal and financial set-up of the Grant Agreements	The rules are described in General Annex G.

Call - RAISE Doctoral Networks for AI in Science

HORIZON-RAISE-2026-01-MSCA

Overview of this call⁹

<u>Proposals are invited against the following Destinations and topic(s):</u>

					, ,
Topics	Type of	Action	Budgets (EUR million)	Expected EU contribution per project (EUR million)	Indicative number of projects expected to be funded
Opening: 28 May 2026 Deadline(s): 24 Nov 2026					
Horizontal call - AI in science	Horizontal call - AI in science				
HORIZON-RAISE-2026-01-03: RAISE Doctoral Networks for AI in Science (RAISE pilot)	TMA Networks	Doctoral	30.00		Not relevant
HORIZON-RAISE-2026-01-03: RAISE Doctoral Networks for AI in Science (RAISE pilot)	TMA Networks Industrial Doctorates	Doctoral -			Not relevant

The Director-General responsible for the call may decide to open the call up to one month prior to or after the envisaged date(s) of opening.

The Director-General responsible may delay the deadline(s) by up to two months.

All deadlines are at 17.00.00 Brussels local time.

The budget amounts are subject to the availability of the appropriations provided for in the general budget of the Union for 2026 and 2027.

	HORIZON-RAISE-2026-01-03: RAISE Doctoral Networks for AI in Science (RAISE pilot)			Not relevant	
Overall indicative budget			30.00		

General conditions relating to this call		
Admissibility conditions	The conditions are described in General Annex A.	
Eligibility conditions	The conditions are described in General Annex B.	
Financial and operational capacity and exclusion	The criteria are described in General Annex C.	
Award criteria	The criteria are described in General Annex D.	
Documents	The documents are described in General Annex E.	
Procedure	The procedure is described in General Annex F.	
Legal and financial set-up of the Grant Agreements	The rules are described in General Annex G.	

Horizontal calls

Horizontal call - R&I in Support of the Clean Industrial Deal

Europe is staying the course on the **European Green Deal**, including the goal to be the first climate-neutral continent by 2050, as well as reaching the 2030 climate target of reducing net greenhouse gas (GHG) emissions by 55% relative to 1990 level. This also includes the intermediate 2040 target of reducing net GHG emissions by 90%.

Rapidly increasing energy prices and growing geopolitical tensions threatening the security of supply of Europe's energy challenge our competitiveness vis-a-vis other global economies. There is a need to mobilise investments to expand the generation of clean resources, strengthen and secure the competitiveness and resilience of clean tech industries, and decarbonise energy-intensive industries, as well as to modernise electricity grids, transport networks and storage infrastructure to better connect and improve the performance of Europe's clean energy systems. At the same time, circularity remains a priority and is key to making the most of the EU's limited resources, reducing dependencies, and contributing to the reduction of CO2 emissions.

The <u>Competitiveness Compass</u>¹⁰ sets a path for Europe to become the place where future technologies, services, and clean products are invented, manufactured, and put on the market, whilst being the first continent to become climate neutral. The <u>Draghi Report</u>¹¹ identifies three transformational imperatives to boost Europe's competitiveness and resilience, and the Competitiveness Compass sets out an approach and a selection of flagship measures to translate each of these imperatives into reality: 1) Closing the innovation gap; 2) A joint roadmap for decarbonisation and competitiveness; and 3) Reducing excessive dependencies and increasing security.

Research and innovation are key enablers of this industrial and economic transformation. This is highlighted in the European Commission's new political guidelines for 2024-2029, which put "research and innovation at the heart of Europe's economy".

In this vein, the <u>Clean Industrial Deal</u>¹², as a follow-up to the Competitiveness Compass, aims to direct investment towards infrastructure and industry in order to support the EU's industrial decarbonisation, resilience, growth, and competitiveness.

The Clean Industrial Deal confirms Europe's dedication to its decarbonisation goals by offering clear business incentives. It will help **create lead markets** to boost supply and demand in **clean tech and energy-intensive industries** (such as chemicals, cement, steel and metal), enabling the decarbonisation and industrial competitiveness of Europe at the same time. An integral focus is to **support the acceleration of the roll-out of clean energy and**

¹⁰ COM(2025) 30 final

https://commission.europa.eu/topics/eu-competitiveness/draghi-report en

¹² COM(2025) 85 final

industry decarbonisation solutions, to develop sectoral transition pathways and to reinforce a circular economy.

The Clean Industrial Deal Communication states that "Research and Innovation (R&I) is a key enabler for promoting the next generation of clean tech, clean energy and decarbonised manufacturing in the EU. The flagship Horizon Europe call with an indicative budget of EUR 600 million under the 2026-2027 work programme supports fit-for-deployment projects. This will aim at fostering synergies between the Framework Programme for R&I and the Innovation Fund, creating a pipeline of projects from R&I to deployment."

The main aim of this call is to support the development of a new generation of demonstrators in clean tech and decarbonised industry that combine technological excellence with market readiness with a view to accelerating their market deployment.

The call will follow a **bottom-up and industry-led approach** to maximise the impact on competitiveness and decarbonisation across EU industrial sectors (e.g. decarbonised industries, energy and transport), allowing for **cross-sectorial system integration** and a market-driven R&I response to industry needs. Accordingly, the call will consist of **two large open topics** focusing on: 1) Clean Tech for Climate; and 2) Decarbonisation of Energy-Intensive Industries. A complementary call of EUR 50 million in support of the Clean Industrial Deal is included in the Research Fund for Coal and Steel.

In this sense, this call supporting the Clean Industrial Deal introduces a new approach to reinforce the activities of the largest component of the Horizon Europe programme, Pillar II ('Global Challenges and European Industrial Competitiveness'), which supports projects related to societal challenges striving to reinforce technological and industrial capacities. It will be complemented by a number of specific sectorial actions within Cluster 4 ("Digital, Space, and Industry") and Cluster 5 ("Climate, Energy, and Mobility), including the Clean Hydrogen Joint Undertaking as part of an overall coordinated portfolio management approach.

The expected output of the call will be projects that are "Fit for deployment" in terms of technological feasibility, but importantly also in terms of having a realistic business case and a sound market-readiness strategy in the dissemination and exploitation plan. This will support the EU innovation value chain to supply the deployment pipeline with suitable R&I solutions ready for deployment in the market through private/public investment (including relevant EU deployment programmes, such as the Innovation Fund).

Proposals submitted under this call are expected to set out a credible pathway to contribute to the Clean Industrial Deal's core objectives, and more specifically to several of the following **expected impacts**:

• Accelerating roll-out and deployment. Accelerate the roll-out and deployment of European decarbonised and clean tech solutions across EU industrial sectors (e.g. decarbonised industries, energy and transport).

- **Promoting competitiveness**. Support the European competitiveness of next generation of clean tech and decarbonised industry in the EU.
- Resilience and Strategic Autonomy. Support the expansion of the manufacturing capacity in Europe for industry decarbonisation and clean tech solutions and strengthen sustainable and resilient value chains in Europe to reduce dependencies.
- Leveraging Investments. Facilitate the mobilisation and alignment of public and private financing and investment for innovative clean energy and industry decarbonisation technologies, assets, grids, and processes in the EU.
- Lowering Energy Prices. Reduce the energy price gap in Europe via the deployment of competitive clean tech and industrial decarbonisation solutions.

Instructions for the Business Plan and the Market-Readiness Strategy

A business plan and a credible initial market-readiness strategy are essential components in the ultimate success of an industry-based project, as well as its prospects to attract further investments for deployment. They will both be decisive factors under the impact criterion, and proposers are requested to present a carefully considered business plan and market-readiness strategy, backed by the management of the companies involved. These two elements are mandatory for all proposals, as part of their dissemination and exploitation activities, and will be further developed during the implementation period through a yearly deliverable and a final report in order to ensure fit for deployment at the end of the project.

The *business plan* is expected to demonstrate the expected outcomes of the proposal in terms of enhanced competitiveness and market opportunities for the participants and deployment in the EU, in the short to medium term. It should describe the targeted market(s); estimated total addressable market size in the EU and globally, including the competitive landscape; financial projections (e.g. including revenue, profitability, investment, and cash flow forecasts); user and customer needs and demonstrate that the solutions are fit for matching the market and user needs in a cost-effective manner; and describe the expected market position and any possible competitive advantage.

The *market-readiness strategy* is expected to identify obstacles, requirements and necessary actions for becoming ready for market deployment, for example: securing the required investment commitment for the next phase, including through possible synergies with other programmes; complying with relevant regulatory constraints; securing conditions for permitting; developing necessary standards; accessing and recruiting the required skills; enhancing product robustness; securing industrial integrators; securing the necessary intellectual property rights, and securing user acceptance at large. The market-readiness strategy must include a comprehensive risk assessment analysis.

Innovation Actions — Legal entities established in China are not eligible to participate in Innovation Actions in any capacity. Please refer to the Annex B of the General Annexes of this Work Programme for further details.

Proposals are invited against the following topic(s):

HORIZON-CID-2026-01-01: R&I in Support of the Clean Industrial Deal: Decarbonisation of energy intensive industries (IA) (Processes4Planet and Clean Steel partnerships)

Call: R&I in Support of the Clean Industrial Deal		
Specific conditions		
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 15.00 and 25.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.	
Indicative budget	The total indicative budget for the topic is EUR 125.00 million.	
Type of Action	Innovation Actions	
Eligibility conditions	The conditions are described in General Annex B. The following exceptions apply:	
	If projects use satellite-based earth observation, positioning, navigation and/or related timing data and services, beneficiaries must make use of Copernicus and/or Galileo/EGNOS (other data and services may additionally be used).	
Technology Readiness Level	Activities are expected to start at TRL 6 and achieve TRL 8 by the end of the project – see General Annex B.	
Procedure	The procedure is described in General Annex F. The following exceptions apply: To contribute to a balanced portfolio covering the three technology areas described in the scope below, grants will be awarded to applications not only in order of ranking, but also at least to one (1) application that is the highest ranked for each area according to the main area selected in the application, provided that the applications attain all thresholds.	
Exceptional page limits to proposals/applications	In order to include a business case and exploitation strategy, as outlined in the introduction to this Destination, the page limit in part B of the General Annexes is exceptionally extended by 3 pages.	

Expected Outcome: Proposals are expected to contribute to all the following expected outcomes:

- Accelerate the use of innovative processes to decarbonise industrial processes and bring to the market more cost-effective clean products to strengthen the competitiveness, sustainability (including biodiversity), and resilience of EU industries (with quantifiable contribution);
- Create new innovative first-of-a-kind operational demonstrators and/or optimise newly installed industrial decarbonisation solutions in Europe; and
- Demonstrate the market readiness of the envisaged future clean products and their innovative processes via a credible business plan and an exploitation strategy for industrialisation, including market-tested use cases.

<u>Scope</u>: The Clean Industrial Deal aims to secure the EU as an attractive location for manufacturing, including for energy-intensive industries, and to promote clean tech and new circular business models in order to meet Europe's ambitious decarbonisation and climate neutrality targets. It focuses primarily on the competitive decarbonisation of EU industry and on the production of clean technologies in the EU.

The following three technology areas on energy intensive industries having a strong and promising growth potential in Europe are in scope of this call:

- Managing of carbon cycle (CCU and/or CCUS): further optimization and demonstration of solutions for the capture, utilization or storage of CO2 and/or CO from installations of the energy intensive industries, with significant reduction of energy input (per ton of CO2/CO) related to capture rate and purity compared to current available technologies (target figure 30% reduction), and potential of commercialization of the decarbonized products with respect to LCA (compared to state of the art), market size, and cost.
- Clean energy usage in production (electrification of the processes, decarbonated production, integration of alternative clean energy carriers e.g. hydrogen and technologies, on-site renewable energy storage solutions, usage and upgrade of waste heat): supporting major improvements of clean energy usage in the energy intensive industries until 2035.
- Circularity and resource efficiency (material, energy, water) of production processes: improvement by 30% until 2035 compared to current industrial value, with technological solutions which are commercially viable; and significant reduction of the overall raw material consumption, energy input, freshwater intake, impact on ecosystems and emissions, through circular value networks that convert industrial side-streams and/or end-of-use waste to new feedstock for which no low-CO2-technologies currently exist. Solutions must have an overall positive LCA and remain commercially viable under the expected regulatory and framework conditions at the end of the project.

Proposals should **explicitly select one main area** but can also address in an integrated way a combination of these three areas within an industrial sector, provided that it is innovative and can lead to low carbon solutions. The choice of the specific technologies addressed in the

proposal is left to the project applicants who should include a thorough justification of the choices both in technological and business terms. Use of advanced, and safe and sustainable materials and processes could be also addressed as part of the selected proposals.

Proposals are expected to:

- demonstrate an **adequate integration of relevant technologies** in support of the Clean Industrial Deal. The integration can either be demonstrated in a direct (e.g. reduction of greenhouse emissions of a process) or an indirect (e.g. production of a new green/clean product) manner. Reduction or avoidance of harmful pollutants and impact on biodiversity may also be considered, as relevant. The use of relevant results of R&I projects previously or ongoing funded at EU, national or regional level is encouraged.
- show **industrial leadership** in the deployment after the project. To ensure market readiness and effective collaboration amongst relevant stakeholders, the consortium should be industry driven and composed of a preferably small and manageable number of participants, and its size should be justified. The participation of SMEs is encouraged.

The draft dissemination, exploitation and communication plan is expected to include a sound and convincing **business plan** and **market-readiness strategy** (cf. intro). These should address how to prepare and support the deployment of the proposed tech solution across relevant EU industrial sectors, and/or how to ensure a high potential for market uptake through further private/public investment (including relevant EU deployment programmes, such as the Innovation Fund). They should include a comprehensive analysis of the critical barriers (technological and non-technological) for the successful market deployment and the corresponding plan to tackle them before 2030.

Proposals are expected to include a clear **go/no go moment** ahead of the contracting and demonstration phase. Before this go/no-go moment, the proposal is expected to deliver detailed engineering plans, a techno-economic assessment, a complete business plan and market-readiness strategy, identifying clearly the industrial partner(s) that will lead the deployment. Proposals are also expected to provide a clear and credible pathway to obtaining all needed permits for the deployment phase of the project.

Taking into account that the Clean Industrial Deal focuses on clean tech and decarbonisation of energy-intensive industry, projects funded under this topic will be encouraged to develop synergies and coordinate on similar funded projects under the topics HORIZON-CID-2026-01-02: R&I in Support of the Clean Industrial Deal: Clean Technologies for Climate Action and HORIZON-HORIZON-CID-2027-01-02: R&I in Support of the Clean Industrial Deal: Clean Technologies for Climate Action under this call, as well as with related projects funded under the Processess4Planet, and Clean Steel and other European Partnerships.

This topic implements the co-programmed European partnerships Processes4Planet and Clean Steel.

For instance, biodiversity could be a priority in specific areas with significant impact on flora or fauna

HORIZON-CID-2026-01-02: R&I in Support of the Clean Industrial Deal: Clean Technologies for Climate Action

Call: R&I in Support of the Clean Industrial Deal		
Specific conditions		
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 15.00 and 25.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.	
Indicative budget	The total indicative budget for the topic is EUR 150.00 million.	
Type of Action	Innovation Actions	
Eligibility conditions	The conditions are described in General Annex B. The following exceptions apply: If projects use satellite-based earth observation, positioning, navigation and/or related timing data and services, beneficiaries must make use of Copernicus and/or Galileo/EGNOS (other data and services may additionally be used).	
Technology Readiness Level	Activities are expected to start at TRL 6 and achieve TRL 8 by the end of the project – see General Annex B.	
Procedure	The procedure is described in General Annex F. The following exceptions apply: To contribute to a balanced portfolio covering the three technology areas described in the scope below, grants will be awarded to applications not only in order of ranking, but also at least to one (1) application that is the highest ranked for each area according to the main area selected in the application, provided that the applications attain all thresholds.	
Legal and financial set-up of the Grant Agreements	The rules are described in General Annex G. The following exceptions apply: The funding rate is 70% of the eligible costs, except for non-profit legal entities where the funding rate is up to 100% of the total eligible costs	
Exceptional page limits to proposals/applications	In order to include a business case and exploitation strategy, as outlined in the introduction to this Destination, the page limit in part B of the General Annexes is exceptionally extended to a total maximum of 60 pages.	

<u>Expected Outcome</u>: Proposals are expected to contribute to **all** the following expected outcomes:

- Strengthen the competitiveness, sustainability (including biodiversity) and resilience of an innovative clean tech solution by clearly demonstrating the capability to, significantly:
 - o increase its circular material use rate, based on a sound and realistic baseline;
 - o reduce the levelized cost of energy (LCOE) delivered to end-users including, where relevant, production, distribution, and storage costs, based on a sound and realistic baseline and considering different geographic scenarios; and
 - o contribute to Europe's industrial leadership and competitiveness, in line with the objectives of Net-Zero Industry Act (NZIA)¹⁴ for the EU manufacturing capacity of net-zero technologies^{15,16}.
- Bring this innovative clean tech solution to full technological maturity and close to market-readiness with a view to accelerating its market deployment and/or integration in key industrial sectors in Europe (e.g. manufacturing, energy and transport).

<u>Scope</u>: The **Clean Industrial Deal** aims to secure the EU as an attractive location for manufacturing, including for energy-intensive industries, and to promote clean tech and new circular business models in order to meet Europe's ambitious decarbonisation and climate neutrality and biodiversity preservation targets. It focuses primarily on the competitive decarbonisation of EU industry and on the production of clean technologies in the EU. This requires notably a considerable increase in electrification of EU energy systems and in all end-use sectors of the European economy (either directly, or via enabling intermediate technologies).

The following three clean tech areas have a strong and promising growth potential in Europe. Proposals are expected to address one or several of these areas:

- Integrated net-zero emissions energy systems (e.g. including energy grids, networks and systems)
- Enhanced zero-emission power technologies (e.g. including renewable electricity, heat and energy technologies)

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Net-Zero Industry Act: <u>resource.html</u>

This should apply to each main specific component of the project for which, under the NZIA, it is established that more than 50% of Union's supply originates from a third country. In such cases, at least 50% of these components should be sourced from the EU or other Horizon Europe Associated Countries. In cases where a strong dependency would compromise the viability of the project, beneficiaries may aim at a lower percentage providing an adequate justification in the proposal.

• Storage technologies, renewable fuels, and carbon capture and utilisation (CCU) (e.g. including batteries and other energy storage solutions, renewable hydrogen¹⁷, advanced biofuels and synthetic renewable fuels) enabling climate neutrality

Proposals should explicitly select one main area but can also address in an integrated way a combination of these three areas. Applicants are free to decide on the specific value chain they wish to strengthen in the above clean tech areas.

As part of bringing innovative clean tech solutions closer to the market, proposals may also address step-change in relevant network and infrastructure deployment to facilitate scale up across the trans-European energy and transport networks – e.g. electricity, heat, gas, hydrogen, CO2, batteries, and refuelling networks, etc. Application of advanced innovative materials development, connected process engineering and scale-up, resource efficiency, circularity and recycling may also be addressed as part of the selected value chain, as relevant. Attention should be paid to avoid technologies which may have a negative impact on biodiversity and ecosystems.

Proposals are expected to:

- ensure the development of innovative technological solutions along a specific value chain area. For this, they need to involve an adequate combination of clean tech suppliers, energy users (e.g. manufacturing, energy and transport) and other relevant stakeholders, in order to support a sound business case, taking into account a gender-sensitive and intersectional approach.
- demonstrate an adequate integration of relevant technological solutions including clean tech and industrial decarbonisation solutions in support of the Clean Industrial Deal, and to ensure a clear and quantifiable impact on competitiveness and reduction of GHG emissions. Reduction or avoidance of harmful pollutants and impact on biodiversity may also be considered, as relevant ¹⁸. The integration can either be demonstrated in a direct (e.g. energy to an industrial/transport sector) or an indirect (e.g. energy to grid to an industrial/transport sector) manner. The use of relevant results of R&I projects previously or ongoing funded at EU or national level is encouraged. The integration can either be demonstrated in a direct (e.g. energy to an industrial/transport sector) or an indirect (e.g. energy to grid to an industrial/transport sector) manner. The use of relevant results of R&I projects previously or ongoing funded at EU or national level is encouraged.
- show **industrial leadership** in view of the deployment after the project. To ensure market readiness and effective collaboration amongst relevant stakeholders across a specific clean tech value chain, the consortium should be industry driven and composed of a manageable number of participants (indicatively, not more than ten participants).

For instance, biodiversity could be a priority in specific areas with significant impact on flora or fauna.

Projects need to ensure complementarities with the activities under the Clean Hydrogen Joint Undertaking

The consortium size should be justified based on the extent of the value chain covered. The participation of SMEs is encouraged.

• seek coherence with the work of the Strategic Energy Technology (SET) Plan and relevant industrial alliances.

The draft dissemination, exploitation and communication plan is expected to include a sound and convincing **business plan** and **market-readiness strategy** (cf. intro). They should address how to prepare and support the deployment of the proposed clean tech solution across relevant EU industrial sectors (e.g. energy, transport, manufacturing) and/or how to ensure a high potential for market uptake through further private/public investment (including relevant EU deployment programmes, such as the Innovation Fund). They should include a comprehensive analysis of the critical barriers (technological and non-technological) for the successful market deployment and the corresponding plan to address them.

Proposals are expected to include a clear **go/no go moment** ahead of the contracting and demonstration phase. Before this go/no-go moment, the project is expected to deliver detailed engineering plans, a techno-economic assessment, a complete business plan and market-readiness strategy, identifying clearly the industrial partner(s) that will lead the deployment. Projects are also expected to provide a clear and credible pathway to obtaining all needed permits for the deployment phase of the project.

Taking into account that the Clean Industrial Deal focuses on clean tech and energy-intensive industry decarbonisation, projects funded under this topic will be encouraged to develop synergies and coordinate with similar or complementary projects funded under the topics HORIZON-CID-2026-01-02: R&I in Support of the Clean Industrial Deal: Decarbonisation of Energy Intensive Industries and HORIZON-CID-2027-01-02: R&I in Support of the Clean Industrial Deal: Decarbonisation of Energy Intensive Industries under this call, as well as with relevant projects funded under relevant European Partnerships (including e.g. the Clean Hydrogen Joint Undertaking and the Clean Energy Transition Partnership).

HORIZON-CID-2027-01-01: R&I in Support of the Clean Industrial Deal: Decarbonisation of energy intensive industries (IA) (Processes4Planet and Clean Steel partnerships)

Call: R&I in Support of the Clean Industrial Deal		
Specific conditions		
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 15.00 and 25.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.	
Indicative budget	The total indicative budget for the topic is EUR 125.00 million.	

Type of Action	Innovation Actions
Eligibility conditions	The conditions are described in General Annex B. The following exceptions apply:
	If projects use satellite-based earth observation, positioning, navigation and/or related timing data and services, beneficiaries must make use of Copernicus and/or Galileo/EGNOS (other data and services may additionally be used).
Technology Readiness Level	Activities are expected to start at TRL 6 and achieve TRL 8 by the end of the project – see General Annex B.
Procedure	The procedure is described in General Annex F. The following exceptions apply: To contribute to a balanced portfolio covering the three technology areas described in the scope below, grants will be awarded to applications not only in order of ranking, but also at
	least to one (1) application that is the highest ranked for each area according to the main area selected in the application, provided that the applications attain all thresholds.
Exceptional page limits to proposals/applications	In order to include a business case and exploitation strategy, as outlined in the introduction to this Destination, the page limit in part B of the General Annexes is exceptionally extended by 3
	pages.

<u>Expected Outcome</u>: Proposals are expected to contribute to **all** the following expected outcomes:

- Accelerate the use of innovative processes to decarbonise industrial processes and bring
 to the market more cost-effective clean products to strengthen the competitiveness,
 sustainability (including biodiversity), and resilience of EU industries (with quantifiable
 contribution);
- Create new innovative first-of-a-kind operational demonstrators and/or optimise newly installed industrial decarbonisation solutions in Europe; and
- Demonstrate the market readiness of the envisaged future clean products and their innovative processes via a credible business plan and an exploitation strategy for industrialisation, including market-tested use cases.

<u>Scope</u>: The Clean Industrial Deal aims to secure the EU as an attractive location for manufacturing, including for energy-intensive industries, and to promote clean tech and new circular business models in order to meet Europe's ambitious decarbonisation and climate neutrality targets. It focuses primarily on the competitive decarbonisation of EU industry and on the production of clean technologies in the EU.

The following three technology areas on energy intensive industries having a strong and promising growth potential in Europe are in scope of this call:

- Managing of carbon cycle (CCU and/or CCUS): further optimization and demonstration of solutions for the capture, utilization or storage of CO2 and/or CO from installations of the energy intensive industries, with significant reduction of energy input (per ton of CO2/CO) related to capture rate and purity compared to current available technologies (target figure 30% reduction), and potential of commercialization of the decarbonized products with respect to LCA (compared to state of the art), market size, and cost.
- Clean energy usage in production (electrification of the processes, decarbonated production, integration of alternative clean energy carriers e.g. hydrogen and technologies, on-site renewable energy storage solutions, usage and upgrade of waste heat): supporting major improvements of clean energy usage in the energy intensive industries until 2035.
- Circularity and resource efficiency (material, energy, water) of production processes: improvement by 30% until 2035 compared to current industrial value, with technological solutions which are commercially viable; and significant reduction of the overall raw material consumption, energy input, freshwater intake, impact on ecosystems and emissions, through circular value networks that convert industrial side-streams and/or end-of-use waste to new feedstock for which no low-CO2-technologies currently exist. Solutions must have an overall positive LCA and remain commercially viable under the expected regulatory and framework conditions at the end of the project.

Proposals should **explicitly select one main area** but can also address in an integrated way a combination of these three areas within an industrial sector, provided that it is innovative and can lead to low carbon solutions. The choice of the specific technologies addressed in the proposal is left to the project applicants who should include a thorough justification of the choices both in technological and business terms. Use of advanced, and safe and sustainable materials and processes could be also addressed as part of the selected proposals.

Proposals are expected to:

- demonstrate an **adequate integration of relevant technologies** in support of the Clean Industrial Deal. The integration can either be demonstrated in a direct (e.g. reduction of greenhouse emissions of a process) or an indirect (e.g. production of a new green/clean product) manner. Reduction or avoidance of harmful pollutants and impact on biodiversity may also be considered, as relevant. ¹⁹ The use of relevant results of R&I projects previously or ongoing funded at EU, national or regional level is encouraged.
- show **industrial leadership** in the deployment after the project. To ensure market readiness and effective collaboration amongst relevant stakeholders, the consortium

...

should be industry driven and composed of a preferably small and manageable number of participants, and its size should be justified. The participation of SMEs is encouraged.

The draft dissemination, exploitation and communication plan is expected to include a sound and convincing **business plan** and **market-readiness strategy** (cf. intro). These should address how to prepare and support the deployment of the proposed tech solution across relevant EU industrial sectors, and/or how to ensure a high potential for market uptake through further private/public investment (including relevant EU deployment programmes, such as the Innovation Fund). They should include a comprehensive analysis of the critical barriers (technological and non-technological) for the successful market deployment and the corresponding plan to tackle them before 2030.

Proposals are expected to include a clear **go/no go moment** ahead of the contracting and demonstration phase. Before this go/no-go moment, the proposal is expected to deliver detailed engineering plans, a techno-economic assessment, a complete business plan and market-readiness strategy, identifying clearly the industrial partner(s) that will lead the deployment. Proposals are also expected to provide a clear and credible pathway to obtaining all needed permits for the deployment phase of the project.

Taking into account that the Clean Industrial Deal focuses on clean tech and decarbonisation of energy-intensive industry, projects funded under this topic will be encouraged to develop synergies and coordinate on similar funded projects under the topics HORIZON-CID-2026-01-02: R&I in Support of the Clean Industrial Deal: Clean Technologies for Climate Action and HORIZON-HORIZON-CID-2027-01-02: R&I in Support of the Clean Industrial Deal: Clean Technologies for Climate Action under this call, as well as with related projects funded under the Processess4Planet, and Clean Steel and other European Partnerships.

This topic implements the co-programmed European partnerships Processes4Planet and Clean Steel.

HORIZON-CID-2027-01-02: R&I in Support of the Clean Industrial Deal: Clean Technologies for Climate Action

Call: R&I in Support of the Clean Industrial Deal	
Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of between EUR 15.00 and 25.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
Indicative budget	The total indicative budget for the topic is EUR 140.00 million.
Type of Action	Innovation Actions

Eligibility conditions	The conditions are described in General Annex B. The following exceptions apply: If projects use satellite-based earth observation, positioning, navigation and/or related timing data and services, beneficiaries must make use of Copernicus and/or Galileo/EGNOS (other	
Technology Readiness Level	data and services may additionally be used). Activities are expected to start at TRL 6 and achieve TRL 8 by the end of the project – see General Annex B.	
Procedure	The procedure is described in General Annex F. The following exceptions apply: To contribute to a balanced portfolio covering the three technology areas described in the scope below, grants will be awarded to applications not only in order of ranking, but also at least to one (1) application that is the highest ranked for each area according to the main area selected in the application, provided that the applications attain all thresholds. The rules are described in General Annex G. The following exceptions apply: The funding rate is 70% of the eligible costs, except for non-profit legal entities where the funding rate is up to 100% of the total eligible costs	
Legal and financial set-up of the Grant Agreements		
Exceptional page limits to proposals/applications	In order to include a business case and exploitation strategy, as outlined in the introduction to this Destination, the page limit in part B of the General Annexes is exceptionally extended to a total maximum of 60 pages.	

<u>Expected Outcome</u>: Proposals are expected to contribute to **all** the following expected outcomes:

- Strengthen the competitiveness, sustainability (including biodiversity) and resilience of an innovative clean tech solution by clearly demonstrating the capability to, significantly:
 - o increase its circular material use rate, based on a sound and realistic baseline;
 - o reduce the levelized cost of energy (LCOE) delivered to end-users including, where relevant, production, distribution, and storage costs, based on a sound and realistic baseline and considering different geographic scenarios; and

- o contribute to Europe's industrial leadership and competitiveness, in line with the objectives of Net-Zero Industry Act (NZIA)²⁰ for the EU manufacturing capacity of net-zero technologies^{21,22}.
- Bring this innovative clean tech solution to full technological maturity and close to market-readiness with a view to accelerating its market deployment and/or integration in key industrial sectors in Europe (e.g. manufacturing, energy and transport).

<u>Scope</u>: The **Clean Industrial Deal** aims to secure the EU as an attractive location for manufacturing, including for energy-intensive industries, and to promote clean tech and new circular business models in order to meet Europe's ambitious decarbonisation and climate neutrality and biodiversity preservation targets. It focuses primarily on the competitive decarbonisation of EU industry and on the production of clean technologies in the EU. This requires notably a considerable increase in electrification of EU energy systems and in all end-use sectors of the European economy (either directly, or via enabling intermediate technologies).

The following three clean tech areas have a strong and promising growth potential in Europe. Proposals are expected to address one or several of these areas:

- Integrated net-zero emissions energy systems (e.g. including energy grids, networks and systems)
- Enhanced zero-emission power technologies (e.g. including renewable electricity, heat and energy technologies)
- Storage technologies, renewable fuels, and carbon capture and utilisation (CCU) (e.g. including batteries and other energy storage solutions, renewable hydrogen²³, advanced biofuels and synthetic renewable fuels) enabling climate neutrality

Proposals should explicitly select one main area but can also address in an integrated way a combination of these three areas. Applicants are free to decide on the specific value chain they wish to strengthen in the above clean tech areas.

As part of bringing innovative clean tech solutions closer to the market, proposals may also address step-change in relevant network and infrastructure deployment to facilitate scale up across the trans-European energy and transport networks – e.g. electricity, heat, gas, hydrogen, CO2, batteries, and refuelling networks, etc. Application of advanced innovative materials development, connected process engineering and scale-up, resource efficiency,

20

Net-Zero Industry Act: <u>resource.html</u>

This should apply to each main specific component of the project for which, under the NZIA, it is established that more than 50% of Union's supply originates from a third country. In such cases, at least 50% of these components should be sourced from the EU or other Horizon Europe Associated Countries. In cases where a strong dependency would compromise the viability of the project, beneficiaries may aim at a lower percentage providing an adequate justification in the proposal.

^{22 860}c257b-16db-429e-91c1-a30bea57e7ce en
23 Projects need to ensure complementarities with the activities under the Clean Hydrogen Joint Undertaking

circularity and recycling may also be addressed as part of the selected value chain, as relevant. Attention should be paid to avoid technologies which may have a negative impact on biodiversity and ecosystems.

Proposals are expected to:

- ensure the development of innovative technological solutions along a specific value chain area. For this, they need to involve an adequate combination of clean tech suppliers, energy users (e.g. manufacturing, energy and transport) and other relevant stakeholders, in order to support a sound business case, taking into account a gender-sensitive and intersectional approach.
- demonstrate an adequate integration of relevant technological solutions including clean tech and industrial decarbonisation solutions in support of the Clean Industrial Deal, and to ensure a clear and quantifiable impact on competitiveness and reduction of GHG emissions. Reduction or avoidance of harmful pollutants and impact on biodiversity may also be considered, as relevant ²⁴. The integration can either be demonstrated in a direct (e.g. energy to an industrial/transport sector) or an indirect (e.g. energy to grid to an industrial/transport sector) manner. The use of relevant results of R&I projects previously or ongoing funded at EU or national level is encouraged. The integration can either be demonstrated in a direct (e.g. energy to an industrial/transport sector) or an indirect (e.g. energy to grid to an industrial/transport sector) manner. The use of relevant results of R&I projects previously or ongoing funded at EU or national level is encouraged.
- show **industrial leadership** in view of the deployment after the project. To ensure market readiness and effective collaboration amongst relevant stakeholders across a specific clean tech value chain, the consortium should be industry driven and composed of a manageable number of participants (indicatively, not more than ten participants). The consortium size should be justified based on the extent of the value chain covered. The participation of SMEs is encouraged.
- seek coherence with the work of the Strategic Energy Technology (SET) Plan and relevant industrial alliances.

The draft dissemination, exploitation and communication plan is expected to include a sound and convincing **business plan** and **market-readiness strategy** (cf. intro). They should address how to prepare and support the deployment of the proposed clean tech solution across relevant EU industrial sectors (e.g. energy, transport, manufacturing) and/or how to ensure a high potential for market uptake through further private/public investment (including relevant EU deployment programmes, such as the Innovation Fund). They should include a comprehensive analysis of the critical barriers (technological and non-technological) for the successful market deployment and the corresponding plan to address them.

For instance, biodiversity could be a priority in specific areas with significant impact on flora or fauna.

Proposals are expected to include a clear **go/no go moment** ahead of the contracting and demonstration phase. Before this go/no-go moment, the project is expected to deliver detailed engineering plans, a techno-economic assessment, a complete business plan and market-readiness strategy, identifying clearly the industrial partner(s) that will lead the deployment. Projects are also expected to provide a clear and credible pathway to obtaining all needed permits for the deployment phase of the project.

Taking into account that the Clean Industrial Deal focuses on clean tech and energy-intensive industry decarbonisation, projects funded under this topic will be encouraged to develop synergies and coordinate with similar or complementary projects funded under the topics HORIZON-CID-2026-01-02: R&I in Support of the Clean Industrial Deal: Decarbonisation of Energy Intensive Industries and HORIZON-CID-2027-01-02: R&I in Support of the Clean Industrial Deal: Decarbonisation of Energy Intensive Industries under this call, as well as with relevant projects funded under relevant European Partnerships (including e.g. the Clean Hydrogen Joint Undertaking and the Clean Energy Transition Partnership).

Horizontal call - AI in science

As pilots for the European Commission's recently announced RAISE (Resource for AI Science in Europe) initiative, a package of EUR 100 million for five new topics aims to foster interdisciplinary breakthroughs at the intersection of AI and scientific discovery. This budget comes from Clusters 4 and 6.

Two topics will support the creation of Thematic Networks of Excellence in AI in Science, bringing together leading institutions in materials science, agriculture, and environmental pollution to share knowledge and build robust, cross-sector collaboration on AI in science.

Two further topics will fund the development of Automated Labs for AI in Science, targeting key application areas in materials science and food research, enabling faster, data-driven experimentation and innovation.

The last topic will establish Doctoral Networks (modelled after the Marie Skłodowska-Curie action) to train a new generation of researchers in AI-driven scientific methods across all disciplines.

These actions are expected to create interconnected networks aiming at addressing the challenges of the field, going beyond the scope of the projects. They will also help build the RAISE scientific community which will contribute to shaping modern science. Together, these initiatives represent a coordinated effort to embed AI in the core of scientific research in Europe and pave the way to RAISE.

Eligibility to participate is also subject to the 'Participation of Chinese universities linked to the Ministry of Industry and Information Technology (MIIT)' eligibility condition (see General Annex B of the General Annexes).

Proposals are invited against the following topic(s):

HORIZON-RAISE-2026-01-01: Thematic Networks of Excellence for AI in Science (RAISE pilot) (RIA)

Call: AI in Science	
Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of around EUR 15.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
Indicative budget	The total indicative budget for the topic is EUR 15.00 million.
Type of Action	Research and Innovation Actions
Technology	Activities are expected to start at TRL 2-3 and achieve TRL 4-5 by the

Readiness Level	end of the project – see General Annex B.
	1 3

Expected Outcome:

- Scientific progress with the help of AI, addressing strategic scientific challenges in the thematic areas selected (areas pending interest from thematic clusters);
- Pilot networks of excellent labs in the selected thematic areas to pool talent and expertise
 as part of a Resource for AI Science in Europe (RAISE), operating as a virtual institute
 across Europe;
- Establish a model of cooperation among these labs and support the development of a strategic research agenda for the application of AI in scientific research in the selected thematic domain(s)
- Reinforce the European AI in science community, attract top-notch talent and spread excellence in AI in science;
- Develop synergies with the "Science for AI" RAISE pilot call.

Scope: The aim of this topic is to establish networks of excellent labs across Europe, dedicated to collaborative research using AI in strategic and promising scientific areas or domains, piloting RAISE and aligning research efforts.

The selected consortia will be composed of leading European research labs in the thematic area with strong experience in applying AI in the research process. At least half the members of the consortium should have a proven track record of developing innovative AI solutions for scientific research. Consortia are welcome to involve expertise in Social Sciences and Humanities in their proposal as they see fit to achieve the objectives.

Each network of excellence will be dedicated to the application of AI to scientific research in a specific thematic area or scientific discipline. A thematic network of excellence for AI in materials science is proposed (Cluster 4). Thematic areas for further networks of excellence are to be defined in collaboration with participating clusters, pending interest, and could include life sciences/biotech, rare diseases, space/satellite data use, sustainable chemistry, bioeconomy or circular economy.

To achieve these objectives, the consortium will undertake a range of dedicated activities:

- Draw an ambitious strategic research agenda for the field and identify the key scientific grand challenges that can be addressed with AI in the thematic area of the network.
- Carry out collaborative research to solve the prioritised scientific challenges, through explicit targets and milestones.
- As part of RAISE as a virtual institute, closely work with central RAISE governance and the other RAISE networks of excellence as privileged partners for sharing data, research results, expertise and infrastructure.

- Develop talent and knowledge exchange schemes (e.g. jointly supervised fellowships, mobility schemes, summer schools, matchmaking events) and include partnering schemes with institutes outside the excellence network to spread excellence across Europe.
- Identify, expand, curate, integrate share and make available relevant datasets and AI
 models. Develop community-driven standards and benchmarks for AI models in the
 thematic scientific area or discipline.
- Develop collaborations with industry for uptake of scientific outcomes and AI-based research methodologies.

The membership of the consortium will be gradually extended. The core consortium will represent 70% of the efforts. During the first year, the project will set an open and objective selection process to complement the initial consortium, based on excellence and ability to innovate and further the research agenda. New members will then join the ongoing common research efforts.

Proposals are expected to develop synergies with running Horizon Europe projects in the same field, for example with HORIZON-CL4-INDUSTRY-2025-01-DIGITAL-61.

HORIZON-RAISE-2026-01-02: Thematic Networks of Excellence for AI in Science – Agriculture and Environment (RAISE pilot)

Call: AI in Science	
Specific conditions	
Expected EU contribution per project	The Commission estimates that an EU contribution of around EUR 13.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
Indicative budget	The total indicative budget for the topic is EUR 13.00 million.
Type of Action	Research and Innovation Actions
Technology Readiness Level	Activities are expected to start at TRL 2-3 and achieve TRL 4-5 by the end of the project – see General Annex B.

<u>Expected Outcome</u>: Project results are expected to contribute to the following expected outcomes:

• Scientific progress with the help of AI, addressing strategic scientific challenges in the thematic areas selected (agricultural sciences and environmental pollution sciences);

- Pilot network of excellent labs in the selected thematic areas to pool talent and expertise as part of a Resource for AI Science in Europe (RAISE), operating as a virtual institute across Europe;
- Establish a model of cooperation among these labs and support the development of a strategic research agenda for the application of AI in scientific research in the selected thematic domains;
- Reinforce the European AI in science community, attract top-notch talent and spread excellence in AI in science;
- Develop synergies with the "Science for AI" RAISE pilot call.

<u>Scope</u>: The aim of this topic is to establish a network of excellent labs across Europe, dedicated to collaborative research using AI in strategic and promising scientific areas or domains, piloting RAISE and aligning research efforts.

The selected consortium will be composed of leading European research labs in the thematic area with strong experience in applying AI in the research process. At least half the members of the consortium should have a proven track record of developing innovative AI solutions for scientific research. Consortia are welcome to involve expertise in Social Sciences and Humanities in their proposal as they see fit to achieve the objectives.

The network of excellence will be dedicated to the application of AI to scientific research in a agricultural sciences and environmental pollution sciences (Cluster 6).

To achieve these objectives, the consortium will undertake a range of dedicated activities:

- Draw an ambitious strategic research agenda for the field and identify the key scientific grand challenges that can be addressed with AI in the thematic area of the network.
- Carry out collaborative research to solve the prioritised scientific challenges, through explicit targets and milestones.
- As part of RAISE as a virtual institute, closely work with central RAISE governance and the other RAISE networks of excellence as privileged partners for sharing data, research results, expertise and infrastructure.
- Develop talent and knowledge exchange schemes (e.g. jointly supervised fellowships, mobility schemes, summer schools, matchmaking events) and include partnering schemes with institutes outside the excellence network to spread excellence across Europe.
- Identify, expand, curate, integrate share and make available relevant datasets and AI
 models. Develop community-driven standards and benchmarks for AI models in the
 thematic scientific area or discipline.

• Develop collaborations with industry for uptake of scientific outcomes and AI-based research methodologies.

The membership of the consortium will be gradually extended. The core consortium will represent 70% of the efforts. During the first year, the project will set an open and objective selection process to complement the initial consortium, based on excellence and ability to innovate and further the research agenda. New members will then join the ongoing common research efforts.

Proposals are expected to develop synergies with running Horizon Europe projects in the same field, notably with the projects on AI foundation models in agricultural sciences and environmental pollution sciences funded under topic HORIZON-CL4-INDUSTRY-2025-01-DIGITAL-61: AI Foundation models in science (GenAI4EU).

HORIZON-RAISE-2027-01-01: Automated Scientific Discovery (RAISE pilot) (RIA)

Call: AI in Science				
Specific conditions				
Expected EU contribution per project	The Commission estimates that an EU contribution of around EUR 10.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.			
Indicative budget	The total indicative budget for the topic is EUR 30.00 million.			
Type of Action	Research and Innovation Actions			
Technology Readiness Level	Activities are expected to start at TRL 3 and achieve TRL 5 by the end of the project – see General Annex B.			

Expected Outcome:

- Development of closed-loop scientific experimentation systems that integrate automation with AI-driven, trustworthy decision-making processes in existing laboratory environments;
- Accelerated scientific discovery with increased efficiency and reproducibility;
- Improved scientific productivity;
- Advancement of laboratory automation, including development of best practices, challenges, and opportunities for accelerating R&D; and
- Prototype functional demonstrators that showcase the integration of automation with AIdriven decision-making, enabling the development of closed-loop scientific experimentation systems.

Scope: This topic addresses the development of safe and trustworthy closed loop scientific experimentation systems through the integration of laboratory automation with AI-driven decision-making processes and robust data infrastructures. Funded projects will help scientific labs with an already advanced level of automation and digitalisation to design, develop, and test the intelligence layer that enables scientific instrumentation to semi- or fully autonomously plan, run, and analyse experiments, ideally in coordination/network with other labs and without requiring a complete redesign of existing laboratory outfitting.

Proposals will incorporate comprehensive data management systems capable of handling the collection, storage, processing, and sharing of experimental data. This includes developing scalable and secure data storage solutions, efficient data processing and analysis tools, and mechanisms to facilitate data sharing and collaboration across labs, while ensuring data security and privacy.

Systems could incorporate AI-driven resource optimisation modules, actively minimising energy, reagent, and material consumption during automated experimentation cycles. Systems should incorporate appropriate level of security and robustness by design.

Proposals should demonstrate how an existing lab can be retrofitted with AI-driven systems to plan, execute, and analyse experiments in a closed-loop fashion, incorporating human oversight and interaction to ensure accuracy, safety, and ethical compliance.

Possible research targets include (non-exhaustively):

- Autonomous/semi-autonomous and adaptive AI systems (including agentic AI) that connect with laboratory instruments and robotics and can autonomously plan, act, learn and adapt within a scientific environment, within a validated safe pipeline,
- Assistive and interactive safe AI-managed robotic systems that automate diverse experiments and can be applied to a diverse hardware setup.
- Scalable automation solutions and networked AI systems that enable collaborative experimentation across multiple labs and networks of labs (including different geographic locations), supporting the simultaneous execution of large volumes of experiments,
- Systems that provide real-time data processing and analytics, enabling immediate feedback and dynamic adjustments during experiments
- Standards and protocols to ensure interoperability between different laboratory instruments, robotics, and AI systems
- Intuitive user interfaces for enhanced human-machine interaction
- AI-driven predictive maintenance systems to optimize equipment uptime and resource utilization.

• Exploration of how scientific automation technologies can be adapted for use in various scientific disciplines beyond those in the scope of this call

<u>Proposals should demonstrate close interdisciplinary collaboration of computer/AI scientists and domain scientists.</u>

While the scope of this call prioritises software development, it does not exclude the justified purchase of complementary equipment necessary to implement the research targets of the project.

An initial focus on materials science is put forward (Cluster 4). Impact areas of automated experimentation in this field could include (non-exhaustively) drug discovery, battery technologies, photovoltaics, carbon capture/storage, water purification, soil remediation, environmentally friendly fertilizers, development of alternative protein sources in food production, sustainable fabrics/dyes.

The thematic focus of this topic can be expanded to include scientific disciplines and experimental settings of interest to collaborating clusters.

International collaboration is encouraged.

Proposals are expected to develop synergies with running Horizon Europe projects in the same field, for example with HORIZON-CL4-INDUSTRY-2025-01-DIGITAL-61.

HORIZON-RAISE-2027-01-02: Automated Scientific Discovery – Food (RAISE pilot)

Call: AI in Science			
Specific conditions			
Expected EU contribution per project	The Commission estimates that an EU contribution of around EUR 3.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.		
Indicative budget	The total indicative budget for the topic is EUR 3.00 million.		
Type of Action	Research and Innovation Actions		

<u>Expected Outcome</u>: Project results are expected to contribute to the following expected outcomes:

- Development of closed-loop scientific experimentation systems that integrate automation with AI-driven, trustworthy decision-making processes in existing laboratory environments;
- Accelerated scientific discovery with increased efficiency and reproducibility;
- Improved scientific productivity;

- Advancement of laboratory automation, including development of best practices, challenges, and opportunities for accelerating R&D;
- Prototype functional demonstrators that showcase the integration of automation with AIdriven decision-making, enabling the development of closed-loop scientific experimentation systems.

<u>Scope</u>: This topic addresses the development of safe and trustworthy closed loop scientific experimentation systems through the integration of laboratory automation with AI-driven decision-making processes and robust data infrastructures. The funded project will help scientific labs with an already advanced level of automation and digitalisation to design, develop, and test the intelligence layer that enables scientific instrumentation to semi- or fully autonomously plan, run, and analyse experiments, ideally in coordination/network with other labs and without requiring a complete redesign of existing laboratory outfitting.

Proposals will incorporate comprehensive data management systems capable of handling the collection, storage, processing, and sharing of experimental data. This includes developing scalable and secure data storage solutions, efficient data processing and analysis tools, and mechanisms to facilitate data sharing and collaboration across labs, while ensuring data security and privacy.

Systems could incorporate AI-driven resource optimisation modules, actively minimising energy, reagent, and material consumption during automated experimentation cycles. Systems should incorporate appropriate level of security and robustness by design.

Proposals should demonstrate how an existing lab can be retrofitted with AI-driven software systems to plan, execute, and analyse experiments in a closed-loop fashion, incorporating human oversight and interaction to ensure accuracy, safety, and ethical compliance.

Possible research targets include (non-exhaustively):

- Autonomous/semi-autonomous and adaptive AI systems (including agentic AI) that
 connect with laboratory instruments and robotics and can autonomously plan, act, learn
 and adapt within a scientific environment, within a validated safe pipeline;
- Assistive and interactive safe AI-managed robotic systems that automate diverse experiments and can be applied to a diverse hardware setup;
- Scalable automation solutions and networked AI systems that enable collaborative experimentation across multiple labs and networks of labs (including different geographic locations), supporting the simultaneous execution of large volumes of experiments;
- Systems that provide real-time data processing and analytics, enabling immediate feedback and dynamic adjustments during experiments;

- Standards and protocols to ensure interoperability between different laboratory instruments, robotics, and AI systems;
- Intuitive user interfaces for enhanced human-machine interaction;
- AI-driven predictive maintenance systems to optimize equipment uptime and resource utilization;
- Exploration of how scientific automation technologies can be adapted for use in various scientific disciplines beyond those in the scope of this call.

While the scope of this call prioritises software development, it does not exclude the justified purchase of complementary equipment necessary to implement the research targets of the project.

Impact areas of automated experimentation in biomass and precision fermentation could include the development of alternative protein sources in food production and alternative fats, bio-based materials, specialty carbohydrates, biotechnologies in food systems (such as biochemicals, microbial cultures, etc), food ingredients.

International collaboration is encouraged.

HORIZON-RAISE-2026-01-03: RAISE Doctoral Networks for AI in Science (RAISE pilot)

Expected Outcome: This action builds on the MSCA Doctoral Networks 2026 call (HORIZON-MSCA-DN-2026).

The project results are expected to contribute to the following outcomes:

For supported doctoral candidates:

- New research and transferable skills and competences in the application of AI in science, leading to improved employability and career prospects within and outside academia;
- New knowledge allowing the conversion of ideas into products and services, where relevant;
- Enhanced networking and communication capacities with scientific peers, as well as with the general public that will increase and broaden the research and innovation impact.

For participating organisations:

- Improved quality, relevance and sustainability of doctoral training programmes and supervision arrangements;
- Enhanced cooperation and transfer of knowledge between sectors and disciplines;

- Increased integration of training and research activities between participating organisations;
- Boosted R&I capacity and uptake of AI in science;
- Increased internationalisation and attractiveness;
- Regular feedback of research results into teaching and education at participating organisations.

Scope: Successful RAISE Doctoral Networks and doctoral candidates will be associated with RAISE, the Resource for AI Science in Europe. They will become part of the RAISE research community and will interact with its other members.

As such, the scope of this call is limited to AI (artificial intelligence) in science, as outlined below. Proposals should therefore clearly specify how they meet this "AI in science" criterion.

Doctoral candidates are to either develop or significantly participate in the development of innovative AI systems, models, tools or methodologies for their scientific domain. These systems, models, tools or methodologies must substantially innovate the way in which scientific information is analysed and enable a scientific contribution that furthers the state of the art in the discipline of the doctoral research.

The development of the AI tool, model or methodology is to be an integral and indispensable part of the research work and be clearly delineated in the research work package. The scientific advancements of the project are to be directly dependent on the capabilities and application of these AI algorithms to drive the scientific inquiry, prediction, or understanding.

Proposals are to achieve research results in the domain-scientific discipline of the doctoral research through using innovative AI techniques, going beyond a unique focus on computer-scientific AI development (e.g. to result in publications only in computer-scientific AI-related venues) or the use of existing AI systems, methodologies or general-purpose computational tools for data processing/statistical analysis in an instrumental way.

All doctoral candidates should receive dedicated doctoral-level training on AI in science (understood as outlined above).

In order to apply for the RAISE Doctoral Networks call, applicants must submit their proposal to the Marie Skłodowska-Curie actions (MSCA) Doctoral Networks 2026. At proposal stage, applicants will be able to declare their interest in being considered for the RAISE Doctoral Networks and, if so, they should demonstrate that their proposal falls within the scope of the RAISE call.

The proposals submitted under the RAISE Doctoral Networks must fulfil all the admissibility and eligibility conditions of the MSCA Doctoral Networks 2026. The RAISE proposals will be evaluated applying the MSCA award criteria and the MSCA scoring system.

At the end of the MSCA evaluation procedure, a cross-panel list of fundable RAISE proposals will be established with the highest-ranking reserve list proposals. The list would be ranked according to the MSCA evaluation scores and comprise proposals with a requested budget as close as possible to 3 times the available budget. Experts will assess the relevance of the proposals on this list to the RAISE topic. The final ranking of the RAISE proposals will be established taking into consideration the MSCA score and the assessment of the relevance of the proposal to the RAISE topic.



Budget²⁵

	2026 Budget (EUR million)	2027 Budget (EUR million)			
Calls					
HORIZON-CID-2026-01	275.00				
HORIZON-CID-2027-01		265.00			
HORIZON-RAISE-2026-01	28.00				
HORIZON-RAISE-2027-01		33.00			
HORIZON-RAISE-2026-01-MSCA	30.00				
Other actions					
Estimated total budget	333.00	298.00			

The budget figures given in this table are rounded to two decimal places.

The budget amounts are subject to the availability of the appropriations provided for in the general budget of the Union for 2026 and 2027.