 ****

|  |  |
| --- | --- |
| Deadline | **18 April 2023 17:00:00 Brussels time** |
| Call name | **Climate sciences and responses (HORIZON-CL5-2023-D1-01)** |
| www | [Funding & tenders (europa.eu)](https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/horizon-cl5-2023-d1-01-01;callCode=HORIZON-CL5-2023-D1-01;freeTextSearchKeyword=;matchWholeText=true;typeCodes=1;statusCodes=31094501,31094502,31094503;programmePeriod=null;programCcm2Id=43108390;programDivisionCode=null;focusAreaCode=null;destinationGroup=null;missionGroup=null;geographicalZonesCode=null;programmeDivisionProspect=null;startDateLte=null;startDateGte=null;crossCuttingPriorityCode=null;cpvCode=null;performanceOfDelivery=null;sortQuery=sortStatus;orderBy=asc;onlyTenders=false;topicListKey=callTopicSearchTableState)https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/horizon-cl5-2023-d1-01-01;callCode=HORIZON-CL5-2023-D1-01;freeTextSearchKeyword=;matchWholeText=true;typeCodes=1;statusCodes=31094501,31094502,31094503;programmePeriod=null;programCcm2Id=43108390;programDivisionCode=null;focusAreaCode=null;destinationGroup=null;missionGroup=null;geographicalZonesCode=null;programmeDivisionProspect=null;startDateLte=null;startDateGte=null;crossCuttingPriorityCode=null;cpvCode=null;performanceOfDelivery=null;sortQuery=sortStatus;orderBy=asc;onlyTenders=false;topicListKey=callTopicSearchTableState |
| Topic | Further climate knowledge through advanced science and technologies for analysing Earth observation and Earth system model data |
| Focused on |  |
| Applicant | Any participating organisation established in an EU Member State or third country associated to the Programme can be the applicant. This organisation applies on behalf of all participating organisations involved in the project. |
| Team |  cooperation between “big data” engineers, EO specialists and climate scientists. |
| Eligible organisation | Any legal entity, regardless of its place of establishment, including legal entities from nonassociated third countries or international organisations (including international European research organisations4 ) is eligible to participate (whether it is eligible for funding or not), provided that the conditions laid down in the Horizon Europe Regulation5 have been met, along with any other conditions laid down in the specific call topic. A ‘legal entity’ means any natural or legal person created and recognised as such under national law, EU law or international law, which has legal personality and which may, acting in its own name, exercise rights and be subject to obligations, or an entity without legal personality 6 . Beneficiaries and affiliated entities must register in the Participant Register before submitting their application, in order to get a participant identification code (PIC) and be validated by the Central Validation Service before signing the grant agreement. For the validation, they will be asked to upload the necessary documents showing their legal status and origin during the grant preparation stage. A validated PIC is not a prerequisite for submitting an application. |
| Provider | European Commision  |
| Call identifier | **TOPIC ID: HORIZON-CL5-2023-D1-01-01** |
| Call info | **Destination****Climate sciences and responses for the transformation towards climate neutrality (2023/24)**Europe has been at the forefront of climate science and should retain its leadership position to support EU policies as well as international efforts for a global uptake of climate action in line with the Paris Agreement and the Sustainable Development Goals (SDGs), including biodiversity objectives. Advancing climate science and further broadening and deepening the knowledge base is essential to inform the societal transition towards a climate neutral and climate resilient society by 2050, as well as towards a more ambitious greenhouse gas reduction target by 2030. It will involve research that furthers our understanding of past, present and expected future changes in climate and its implications on ecosystems and society, closing knowledge gaps, and the development of the tools that support policy coherence and the implementation of effective mitigation and adaptation solutions.The activities implemented under this section will enable the transition to a climate-neutral and resilient society and economy through improving the knowledge of the Earth system and the ability to predict and project its changes under different natural and socio-economic drivers. This includes a better understanding of society’s response and behavioural changes, allowing a better estimation of the impacts of climate change and the design and evaluation of solutions and pathways for climate change mitigation and adaptation and related social transformation.This Destination contributes directly to the Strategic Plan’s **Key Strategic Orientation** D *”Making Europe the first digitally led circular, climate-neutral and sustainable economy through the transformation of its mobility, energy, construction and production systems”* and the **impact area** “Climate change mitigation and adaptation”.In line with the Strategic Plan, the overall **expected impact**of this Destination is to contribute to the *“Transition to a climate-neutral and resilient society and economy enabled through advanced climate science, pathways and responses to climate change (mitigation and adaptation) and behavioural transformations”*, notably through:* Advancing knowledge and providing solutions in the any of following areas:
	+ Earth system science;
	+ Pathways to climate neutrality;
	+ Climate change adaptation;
	+ Climate services;
	+ Social science for climate action; and
	+ Better understanding of climate-ecosystems interactions.
* Contributing substantially to key international assessments such as those of the Intergovernmental Panel on Climate Change (IPCC), the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) or the European Environment Agency (e.g. European environment - state and outlook reports, SOER).
* Strengthening the European Research Area on climate change.
* Increasing the transparency, robustness, trustworthiness and practical usability of the knowledge base on climate change for use by policy makers, practitioners, other stakeholders and citizens.

Coordination and synergies should be fostered between activities supported under this destination and those under other destinations of cluster 5, as well as with other clusters of Horizon Europe.In particular, complementarities with cluster 4 and cluster 6 should be taken into account by planning for adequate resources for co-ordination and clustering activities. Following a systemic approach, this destination concentrates on activities related to climate science and modelling, whereas cluster 4 supports activities in the area of low-carbon and circular industry, and cluster 6 contributes to R&I on the implementation of climate change mitigation and adaptation solutions in the areas covered by cluster 6 (notably Intervention Area (IA) 1 on biodiversity and nature-based solutions (NBS), Earth observation, IA 4 on seas, oceans and inland waters…).Coordination and synergies are also encouraged with the activities funded under the work programmes on the Horizon Europe missions, in particular the Mission “Adaptation to Climate Change”, the Mission “Climate Neutral and Smart Cities” and the Mission “Restore our Ocean and Waters by 2030”. While this destination supports upstream research activities on climate science, the Missions focus on the testing, demonstration and scale up of solutions to address the challenges of climate change and environmental degradation.Actions should envisage clustering activities with other relevant ongoing and selected projects for cross-projects cooperation, consultations and joint activities on crosscutting issues and share of results, as well as participating in joint meetings and communication events. To this end, proposals should foresee a dedicated work package and/or task and earmark the appropriate resources accordingly.Synergies are also sought throughout this destination with the work of the European Space Agency (ESA), in order to ensure complementarity and mutual benefit regarding research and innovation actions conducted at the ESA. |
| Scope | The EU and its Member States have invested massively in Earth Observation (EO), for example with the Copernicus Programme, the development of climate and Earth System Models (ESMs), and their contribution to the implementation of Global Earth Observation System of Systems (GEOSS), which are yielding unprecedented volumes of data. This topic aims at spurring the exploitation of these assets through advanced data technologies, including artificial intelligence techniques like machine learning or explainability, or new statistical approaches based on the cooperation between “big data” engineers, EO specialists and climate scientists.Actions should create new insights in key processes of the Earth system and improve climate predictions based on advanced exploitation of EO data and their appropriate integration in existing or new data assimilation or modelling approaches. The activities should also lead to improved evaluation tools to facilitate the analysis of ESMs by developing new process-oriented diagnostics to better understand remaining biases and drifts, or unresolved processes or coupling in models, and improve model parameterisation and tuning. Actions should develop new tools or approaches to increase the efficiency (i.e. speed) in analysing model outputs to facilitate the study of such vast amounts of data. Actions should also distil more tailored, usable and reliable information from models and observations for assessing risks caused by extreme weather and climate events in Europe in the coming decades and contribute to an improved detection of climate change on varying space and time scales.Actions should build on the results of, and cooperate with, past and ongoing scientific research related to EO and ESMs[[1]](https://ec.europa.eu/info/funding-tenders/opportunities/portal/#fn1), as well as adaptation strategies at global and regional levels, e.g. the science base supporting the Copernicus Services, ESA data cubes, the relevant action within the GEO multiannual WP, the EuroHPC JU investments in HPC capabilities or Destination Earth.When dealing with models, actions should promote the highest standards of transparency and openness, going well beyond documentation, as much as possible, and extending to aspects, such as assumptions, code and data that is managed in compliance with the FAIR principles[[2]](https://ec.europa.eu/info/funding-tenders/opportunities/portal/#fn2). In particular, beneficiaries of EU funding are required to publish results data in open access repositories and/or as annexes to publications, and provide full openness of any new modules, models or tools developed from scratch or substantially improved. Projects should take into account, during their lifetime, relevant activities and initiatives for ensuring and improving the quality of scientific software and code, such as those resulting from projects funded under the topic HORIZON-INFRA-2023-EOSC-01-02 on the development of community-based approaches. |
| Research area | Climate change adaptation, model development |
| Expected outputs | Projects results are expected to contribute to **all of the** following expected outcomes:* Support to the implementation of the EU Strategy on Adaptation to Climate Change and the Mission on Adaptation to Climate Change, by enabling better informed adaptation plans and strategies at the regional and local level.
* Strengthen science-based decision-making when it comes to resilience and disaster risk management, including on the role of nature-based solutions.
* Stronger local adaptive capacity.
* Improved synergies between national, regional and local Green Deal objectives, in particular adaptation action.
* Better coordinated and more impactful R&I activities on adaptation modelling and risk assessment.
 |
| Call opens | **13 December 2022** |
| SCI deadline | 4. April 2023, 12:00 |
| Final deadline | **18 April 2023 17:00:00 Brussels time** |
| Evaluation results |  |
| Agreement |  |
| Earliest date of implementation |  |
| Latest date of implementation |  |
| Sustainability |  |
| Project duration (min-max) |  |
| Call allocation  | around 8000000Approximately 2 projects will be supported |
| Project budget (min-max) |  |
| Success rate |  |
| Eligible costs | Budget categories: – actual costs (i.e. costs which are real and not estimated or budgeted) for: – personnel costs (unless declared as a unit cost; see below); – subcontracting costs; – purchase costs (unless declared as a unit cost; see below); and – costs of providing financial support to third parties (if provided for in the specific call conditions); – units (i.e. an amount per unit) for: – personnel costs of SME owners/natural persons not receiving a salary; – personnel costs calculated by the beneficiaries according to their usual cost accounting practices (average personnel costs); – costs of internally invoiced goods and services calculated by the beneficiaries according to their usual cost accounting practices; and Horizon Europe - Work programme 2023-2024 General Annexes Part 13 - Page 31 of 43 – specific unit costs (if provided for in the specific call conditions; see also Annex 2a of the grant agreement); – flat-rate (i.e. costs calculated by applying a percentage fixed in advance to other types of eligible costs) for: – indirect costs (25% flat-rate of the total eligible direct costs, excluding eligible direct costs for subcontracting, financial support to third parties and any unit costs or lump sums which include indirect costs); – lump sum (i.e. a global amount deemed to cover all costs of the action or a specific category of costs, if provided for in the specific call conditions). |
| Reimbursement | Research and innovation action: 100% |
| Mode of funding | Ex-ante (advanced payment & interim payments) & ex-post (final payment of 10%) |
| Language of application | English |
| Reporting | The reporting and payment arrangements are fixed in the grant agreement |
| Proposal consists of | All proposals must be submitted electronically via the Funders & Tenders Portal electronic submission system (accessible via the topic page in the Search Funding & Tenders section). Proposals must be complete and contain all parts and mandatory annexes and supporting documents, e.g. plan for the exploitation and dissemination of the results including communication activities, etc. The application form will have two parts: – Part A (to be filled in directly online) contains administrative information about the applicant organisations (future coordinator and beneficiaries and affiliated entities), the summarised budget for the proposal and call-specific questions;– Part B (to be downloaded from the Portal submission system, completed and then assembled and re-uploaded as a PDF in the system) contains the technical description of the project. Annexes and supporting documents will be directly available in the submission system and must be uploaded as PDF files (or other formats allowed by the system). Proposals should be designed to stay as close as possible to the award criteria (see Annex D above). The application form will help to achieve this. When submitting the proposal, the coordinator will have to confirm that they have the mandate to act for all applicants. Moreover, they will have to confirm that the information in the application is correct and complete and that all participants comply with the conditions for receiving EU funding (especially eligibility, financial and operational capacity, exclusion, etc.). Before signing the grant, each participant will have to confirm this again by signing a declaration of honour. Proposals not complying with these requirements will be rejected. For lump sum grants proposals, the estimated budget must be described in a detailed budget table. This will be used as a basis for justifying and/or fixing the lump sum amount. As the lump sum must be an approximation of the costs actually incurred, the costs included in this detailed budget table must comply with the basic eligibility conditions for EU actual cost grants (see AGA — Annotated Grant Agreement, Article 6). This is particularly important for purchases and subcontracting, which must ensure best value for money (or, if appropriate, the lowest price) and be free from any conflicts of interest. If the budget table contains ineligible costs, the grants may be reduced (even later on during implementation of the project or after they end). Exceptionally, the Decision authorising the use of lump sum funding for a specific action might specify that a detailed budget table is not required. Applicants may be asked at a later stage for further documents (for legal entity validation, financial capacity check, bank account validation, etc.) |
| Evaluation criteria | Award criteria: [wp-13-general-annexes\_horizon-2023-2024\_en.pdf (europa.eu)](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/wp-call/2023-2024/wp-13-general-annexes_horizon-2023-2024_en.pdf) |
| Conditions & restrictions |  |
| Call workshop |  |
| SCI contact | Please inform the Project Support about your intention to apply. Do not hesitate anytime to contact us for consulting, discussion or help.+420 38 777 5562, projects@prf.jcu.cz  |
| Download documents | [wp-13-general-annexes\_horizon-2023-2024\_en.pdf (europa.eu)](https://ec.europa.eu/info/funding-tenders/opportunities/docs/2021-2027/horizon/wp-call/2023-2024/wp-13-general-annexes_horizon-2023-2024_en.pdf) |