4th EU-LAC Joint Call in STI 2022

Call Text

Proposal Submission Deadline:
Thursday 28th April 2022, 17.00 hrs CEST

Websites:
https://www.eucelac-platform.eu/joint-actions for Call Text and National / Regional Funding Regulations and Guidelines for Applicants
Link to the partner search tool: ENRICH in LAC Matchmaking platform
Link to the project submission platform: https://ptoutline.eu/app/eu-lac-2022

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Applicants must check the national /regional regulations of their funding organizations before they submit their proposal (see https://www.eucelac-platform.eu/joint-actions)

In case of questions, each participating funding organization has a call contact point for personal consultancies. See Annex 4, page 30.

TABLE OF CONTENTS

1. Role of EU-LAC Interest Group: Background for the 4th EU-LAC Joint Call in STI 2022

The EU-LAC Interest Group was founded in March 2017 in order to maintain the very active bi-regional network built by the EC-funded ERANet-LAC project (2013-2017). It consists of 29 funding agencies from both regions wishing to cooperate in bi-regional science, technology and innovation (STI). The activities organized by the EU-LAC Interest Group aim to support the implementation of the Common EU-LAC Research Area and to create further added value to its four pillars: Mobility of Researchers; increased thematic cooperation to address global challenges, international outreach of Research Infrastructures and Innovation. The European Commission is participating in this initiative with a specific view of maintaining the overall coherence with the Governance of the EU-LAC relations.

So far, EU-LAC funding agencies successfully organized three joint calls: Between 2013 and 2017 the 18 ERANet-LAC partners carried out two transnational joint calls and in 2017/2018 the EU-LAC Interest Group organized successfully its first joint call.

1.1 About the 4th EU-LAC Joint Call

The aim of the Joint Call is to initiate sustainable and multilateral research cooperation between researchers from Europe, Latin-America and the Caribbean countries.

Within the framework of the present EU-LAC Joint Call, transnational research and innovation projects will be funded for a period of up to 36 months.

The goal of the present Joint Call is to create long-term collaboration between EU Member States and/or Associated Countries, Latin-American and Caribbean countries by submitting transnational calls in research and innovation.

2. Design of the present EU-LAC Joint Call

The design of the present Joint Call is of flexible nature to ensure that a wide variety of funding institutions is able to join the Joint Call and that as many researchers as possible from European, Latin-American and Caribbean countries are eligible for funding. For this reason, each participating funding institution will apply its individual national/regional funding regulations.

Before submitting a proposal, the applicant should therefore check the national/ regional regulations of his/her funding organization (see http://eucelac-platform.eu/joint-actions). Furthermore, applicants are recommended to contact the National/Regional Call Contact Person (see Annex 4, page 30) for guidance.

2.2 Participating countries/regions and Call Topics

In total, 15 national/regional funding organizations from 13 countries – 6 from LAC and 7 from Europe - have agreed to participate in the present EU-LAC Joint Call for funding research and innovation projects:

1. Austria: Bundesministerium für Bildung, Wissenschaft und Forschung, BMBWF
2. Bolivia: Ministerio de Educación - Vice Ministerio de Ciencia y Tecnología, MINEDU
3. Brazil: Conselho Nacional de Desenvolvimento Cientifico e Tecnológico, CNPq
4. Brazil: Conselho Nacional das Fundações Estaduais de Amparo à Pesquisa, CONFAP
5. Dominican Republic: Ministerio de Educación Superior, Ciencia y Tecnología, MESCyT
6. Germany: Bundesministerium für Bildung und Forschung, BMBF
7. Italy: Consiglio Nazionale delle Ricerche, CNR
8. Panama: Secretaria Nacional de Ciencia, Tecnología e Innovación, SENACYT
9. Peru: Consejo Nacional de Ciencia Tecnología e Innovación Tecnológica, CONCYTEC
10. Poland: Narodowe Centrum Badań i Rozwoju, NCBR
11. Portugal: Fundação para a Ciência e a Tecnologia, FCT
12. Spain: Instituto de Salud Carlos III, ISCIII
13. Spain: Agencia Estatal de Investigación, AEI
14. Turkey: Turkiye Bilimsel vê Teknolojik Arastirma Kurumu, TUBITAK
15. Uruguay: Agencia Nacional de Investigación e Innovación, ANII

Researchers from **countries that are not listed above** are free to participate in all topics as self-financed/associated partners under special conditions (page 5, section 2.3 information on self-financed/associated partners).

Proposals must be submitted by transnational consortia. Only researchers based in the countries /regions listed below under each of the mentioned topics are eligible for funding through the EU-LAC Joint Call.

The following list shows the list of topics and the countries that are funding each of the topics mentioned (Annex 1, page 14 ff for full details on the topics):

Global Challenges I - Interactions and integration between the climate science, SSH and other communities

Participating funding agencies from: Austria, Bolivia, Brazil (CONFAP), Dominican Republic, Germany, Panama, Poland, Spain (AEI), Turkey, Uruguay

Global Challenges II / Cross-cutting digital research infrastructure

Participating funding agencies from: Austria, Bolivia, Brazil (CNPq and CONFAP), Dominican Republic, Germany, Panama, Spain (AEI), Turkey

Health I - Personalised Medicine

Participating funding agencies from: Austria, Bolivia, Brazil (CNPq and CONFAP), Dominican Republic, Germany, Italy, Panama, Poland, Spain (AEI and ISCIII), Turkey

Health II - EU-LAC Regional Hubs: Integrating Research infrastructures for Health and Disease
Participating funding agencies from: Austria, Bolivia, Brazil (CNPq and CONFAP), Dominican Republic, Germany, Italy, Panama, Peru, Portugal, Spain (AEI), Turkey, Uruguay

Biodiversity and Ecosystem Services Research Infrastructures
Participating funding agencies from: Austria, Bolivia, Brazil (CNPq and CONFAP), Dominican Republic, Germany, Italy, Panama, Peru, Spain (AEI), Turkey

Interoperability of energy data spaces for an optimized exploitation by producers and prosumers / Research Infrastructures
Participating funding agencies from: Austria, Bolivia, Brazil (CONFAP), Dominican Republic, Germany, Panama, Spain (AEI), Turkey

2.3 Composition of consortia

Applicants must be eligible for funding according to the regulations of their respective national Funding Organizations. They can represent public and private scientific, research, technological and innovation institutions on national, federal or EU-LAC regional level, research active industry and NGOs and other institutions involved in research activities, as long as they are eligible for funding according to the respective national and/or institutional regulations.

Only transnational projects will be funded. Each collaborative consortium should have the optimal critical mass to achieve ambitious scientific/innovation goals and should clearly show an added value from working together.

The following criteria must be taken into account: Each consortium submitting a proposal must involve a **minimum of four eligible partners from four different countries with at least two countries from each region** (see the list of funding organizations in section 2.2, page 4 and call contact persons in Annex 4, page 30). A maximum number of national partners applying for funding will be defined in the institutional rules of each funding organization.

Partners not eligible for funding may also be part of the consortia if they are able to clearly demonstrate an added value to the consortium and secure their own funding. However, the coordinator and the majority of partners in a consortium must be eligible for the funding organizations participating in this Call. The self-financed/associated partners must provide the Call Secretariat with a **signed official letter of support** from their Head of Department or Financial Director. A pdf-version of this letter must be included as an annex at the end of the proposal before submitting. Self-financed partners cannot assume the role of coordinator of the consortium.

There should be a principal investigator (PI) for each of the national research groups. Each PI will act as contact person for his or her national funders. One of these PIs should be selected through the project consortium as coordinator to represent the consortium, submit the proposal, and establish any further communication with the Call Secretariat.

A coordinator must not submit more than one proposal. However, one research institution – as a legal entity – is allowed to participate as a coordinator or partner in several project proposals.

NOTE: How to find partners
The call secretariat supports the identification of partner institutions in Latin America/Caribbean and Europe. Under the following link ENRICH in LAC Matchmaking platform a partner search tool is published to help bringing together interested applicants from countries in both regions.
All requests will be published in the search tool and made available to all interested institutions immediately.

2.3.1 Consortium Agreement

Each consortium selected for funding must provide a Consortium Agreement (CA), signed by all participants, to clarify the potential Intellectual Property Rights (IPR) matters (such as licensing in, licensing out, patent and exploitation strategy) and send it to the Call Secretariat before the project starts officially.

Upon request, this consortium agreement must be made available to the concerned funding organisations.

The consortium agreement must be sent to the call secretariat (UEcelac@fecyt.es) before the project starts officially. It must address (as a minimum), the following points:

- Common start date and duration of the research and / or innovation project
- Organization and management of the project
- Role and responsibilities of each partner resources and funding
- Confidentiality and publishing
- Intellectual Property Rights
- Decision making within the consortium
- Handling of internal disputes
- The liabilities of the research partners towards one another (including the handling of default of contract)

Any issues regarding funding are a bilateral matter between each project partner and the relevant funding organization and should be excluded from the CA. The CA, together with any other information required by national regulations, must be made available upon request to the national funding agencies.

Standard documents that can be used as templates and modified according to the specific needs of the consortium can be found at: http://www.desca-2020.eu/. Further instructions will be provided by the Call Secretariat to the coordinators of the projects selected for funding

2.4 Allowable costs and duration of funding

Since funding will be administered according to the terms and conditions of the responsible funding organizations, the concrete costs that can be financed through the project may vary for individual partners in a given project consortium. It is therefore important to check the national rules of the Funding Parties (http://eucelac-platform.eu/joint-actions) and/or to contact the respective national Call Contact Person. The latter can be found in Annex 4, page 30.

The duration of a project can be up to **36 months** (check national regulations). Approved projects should start between December 2022 and February 2023.

2.5 Call budget and funding principle

In the present EU-LAC Joint Call project partners are funded in accordance with their national and regional funding regulations. All funded projects must have passed the international evaluation and ranking proceedings as specified below (point 4, page 8 ff).

The overall budget of the present Joint Call is the sum of the individual budgets allocated by each participating funding institution. If more than one funding institution from a given country participates in the Joint Call, the added amount of all institutions from this country is considered as the country's overall Joint Call contribution.

An overview of the contribution from each funding institution to each of the call topics is given in Annex 3, page 29.

Some funding institutions may decide to set an **upper limit for the budget that can be requested per project** from the national funding agency. The upper funding limits may thus vary from one country to the other**. Applicants should therefore thoroughly check the national and regional regulations** http://eucelac-platform.eu/joint-actions and are strongly recommended to contact their National Call Contact Persons (Annex 4, page 30) before submitting their proposal.

3. Proposal submission

Project proposals must be submitted electronically using the PT Outline webtool from DLR: https://ptoutline.eu/app/eu-lac-2022. All proposals must be written in English. The only currency to be applied in the proposal is EURO.

The coordinator should fill in the application from on behalf of the whole consortium and submit the proposal: Only one online proposal per project is needed. The coordinator must confirm that the proposal is endorsed by all project partners by clicking the relevant box in the PT-Outline webtool. It is not required to send a printed version of the proposal to the Call Secretariat. However, this may be required by some national funding agencies (see National regulations).

The project proposal consists of two parts:

a) Proposal application form: Available for download at https://www.eucelac-platform.eu/joint-actions. This form has to be filled in offline by the project coordinator and uploaded at the PT Outline webtool from DLR: https://ptoutline.eu/app/eu-lac-2022 before final submission of the proposal. It contains the general project data, details on the project consortium, the project description and financial plan.

b) Online Submission Form: This form has to be filled in online by the coordinator. It consists of an overview followed by four pages, each one requiring different information (general project information, data of the project coordinator and partners, project summary). CVs, commitment letters of project partners participating with own funds, as well as letters of support can also be uploaded here, before checking and submitting the proposal.

The applicants may find it useful to check the Guidelines for Applicants, available at the following web pages: https://www.eucelac-platform.eu/joint-actions.

The web-tool will be open for proposal submission from 24th January 2022 to 28th April 2022, 17.00 hrs CEST.

More information on how to submit a proposal with the online tool can be found in the Guidelines for Applicants.

Some funding organizations may ask the applicant to submit a parallel proposal to the funding organization in line with the national/regional requirements. This can be done once the joint proposal has been submitted to the Call Secretariat or after the joint proposal has been evaluated. These additional proposals submitted to the national/regional funding organizations may be evaluated or may not be evaluated by the funding organization, according to the rules and regulations of the funding organization. For further details about each funding organization's requirements with regard to proposal submission, please see https://www.eucelac-platform.eu/joint-actions.

4. Proposal evaluation and funding decision

4.1 Evaluation and Selection Procedure

4.1.1 Evaluation Procedure

The evaluation process involves four steps:

1) Eligibility check: Will be realized by the Call Secretariat, in cooperation with the representatives of the national funding agencies. In addition, the Scientific Evaluation Committee (SEC) will check the eligibility considering the matching of the proposals in the scope of the topic.
2) External written peer review: Will be done remotely by at least two experts covering the specific fields of the research topic(s) addressed in the 4th EU-LAC Joint Call. Each evaluator fills in an individual evaluation form whereby s/he assigns a score to each evaluation item. The evaluator also assesses the alignment of the proposal with the objectives and scope of the call.
3) Ranking of proposals according to the external evaluation results, selection of the best proposals and funding recommendations: Will be done by the Scientific Evaluation Committees (SECs) in a consensus meeting, organized by the Call Secretariat. Each SEC will have at least three experts.
4) Selection of the proposals recommended for funding: Will be done by the Group of Funding Parties' in the final funding decision, taking into account the evaluations and the budget allocated, and all applicable national regulations.

The Scientific Evaluation Committees will formulate a short consensus report for each proposal (strengths and weaknesses) that will be forwarded upon request to the coordinators of the proposals after the evaluation and decision taking by the Group of Funding Parties has been completed.

4.1.2 Eligibility Check / Eligible beneficiaries

Applicants are strongly advised to contact their national Call Contact Persons in due time before submission to check their national eligibility. The list of CCPs is provided in Annex 4 (page 30) and also in the national funding regulations of each funding agency (https://www.eucelac-platform.eu/joint-actions).

A proposal must:

- Conform to the scope and the thematic focus of the call as described in Annex 1 (pages 14 following);
- meet the consortium composition requirements as specified on page 5, section 2.3;
- comply with the maximum allowed duration (page 6, section 2.4);
- comply with the funding principle as specified (see page 7, 2.5 and National Funding Regulations listed at https://www.eucelac-platform.eu/joint-actions.
- comply with the terms of the submission procedure as specified in paragraph 3, page 7 f, proposal submission);
- be complete according to the rules and in line with the required proposal structure described in the Guidelines for Applicants;
- be submitted in English;
- be submitted electronically using the online tool at https://ptoutline.eu/app/eu-lac-2022 (see section 3, from page 7);
- meet the submission deadline (pages 1 and 13).

Following submission, proposals will undergo an eligibility check.

- First, the Call Secretariat will check the eligibility of the proposals against the criteria agreed by the Group of Funding Parties.
- It will then inform the Group of Funding Parties about the results, providing the rationale for non-eligibility of individual proposals (if relevant) and ask the representatives of the funding agencies to check and confirm the eligibility of applicants from their country, according to their national regulations (https://www.eucelac-platform.eu/joint-actions) for National Regulations).
- The Scientific Evaluation Committees (approved by the Group of Funding Parties - GFP - and constituted by experts) will check the eligibility considering the matching of the proposals in the scope of the topic.
- Finally, each Funding Party will approve the list of eligible proposals from its national applicants to the Call Secretariat. And the Call Secretariat will inform the GFP about the results

providing the rationale for non-eligibility of individual proposals (if relevant).

Only proposals meeting all the above-mentioned eligibility criteria will be processed by the Call Secretariat. Non-eligible proposals will be rejected. The applicants will be informed by the Call Secretariat.

Decisions about eligibility of proposals by the GFP are final.

4.1.3 Evaluation criteria

The evaluation procedure will be done according to the criteria defined in the following:

1. **Excellence**

- Clarity and pertinence of the objectives;
- Credibility of the proposed approach;
- Integration of diversity considerations in submitted proposals, as well as underrepresented populations in the planned research/innovation. This includes not only diversity in the consortium, but also the inclusion of diversity perspectives and analysis in the research/ innovation itself if it is relevant. A project is considered diversity (or gender) relevant when it concerns individuals or specific groups of people and/or when its findings may affect individuals or specific groups.
- Soundness of the concept, including trans-disciplinary considerations, where relevant;
- Extent to which the proposed work is ambitious, has innovation potential, and is beyond the state of the art (e.g. ground-breaking objectives, novel concepts and approaches).

2. **Impact**

- Expected impacts listed in the description under the relevant topic;
- Enhancing research and innovation capacity and integration of new knowledge;
- Any other environmental and socially important impacts;
- Implementation of Open Science measures (early and open sharing of research; research output management; providing open access to research outputs i.e. publications, data, software, algorithms, etc.), participation in open peer review; involvement of relevant actors including citizens, civil society and end users in the co-creation of R&I contents and agendas;
- Effectiveness of the proposed measures to exploit and disseminate the project results (including management of IPR), to communicate the project and to manage research data where relevant;
- Added value for the EU-LAC cooperation in STI;
- Mobility, networking and training of human resources in both regions;
- For Research Infrastructures topics: Contribution of the RI use to the impact of the project.

3. **Quality and efficiency of the implementation**

- Coherence and effectiveness of the work plan, including appropriateness of the allocation of tasks and resources;
- Complementarity of the participants within the consortium (if relevant) and gender balance among them;
- Appropriateness of the management structures and procedures, including risk and innovation management;

- For Research Infrastructures topics: Appropriateness of the proposal to the research infrastructure.

4. **Economic impact, applicability and exploitation of results**

- Potential for economic impact and exploitation/transfer of results;
- In case of industry and SME participation: Strengthening competitiveness and growth of companies by developing innovations that meet the needs of global markets and, where relevant, deliver such innovations to the market;
- Feasibility;
- Involvement of stakeholders;
- Communication and dissemination of results;
- Exploitation and transfer of results;
- Management of intellectual property issues and consortium agreements.

4.1.4 Rating Scores

The evaluators are requested to assess proposals against a set of criteria, each of which may be awarded a maximum of 5 points per criterion, 20 points maximum, according to the following scale:

EXCELLENT = 5 points The proposal successfully addresses all relevant aspects of the criterion. Any shortcomings are minor.
VERY GOOD = 4 points The proposal addresses the criterion very well, but a small number of shortcomings are present.
GOOD = 3 points The proposal addresses the criterion well, but a number of shortcomings are present.
FAIR = 2 points The proposal broadly addresses the criterion, but there are significant weaknesses.
POOR = 1 point The criterion is inadequately addressed, or there are serious inherent weaknesses.
0 points The proposal fails to address the criterion or cannot be assessed due to missing or incomplete information.

No additional criteria will be used for evaluation and selection of the proposals.

4.2 Priority Ranking through of the Scientific Evaluation Committees

The Scientific Evaluation Committees (SECs) approved by the GFP and constituted by experts or scientific experts, will rank the proposals based on the online evaluations and internal discussions and **recommend to the GFP a list of proposals to be funded.**

4.3 Funding Organizations' Meeting

The GFP will take the **final decision on the proposals** recommended for funding on a consensus basis, based on the recommendations of the Scientific Evaluation Committees. It will discuss and approve the recommended projects according to the ranking list and available budget. The formal funding decisions are taken by the national funding organizations. The funding will be administered according to the terms and conditions of the participating national and regional funding institutions, taking into account the applicable regulations and available funding.

All applicants will be informed about the outcomes of the evaluation within one month after the funding decision.

5. Funding contract

Following the funding decision, all applicants will be informed by the Call Secretariat about the results of the evaluation process and the next steps to be taken. From then on, the national phase will start in each participating country or region. The project partners of each proposal to be funded will conclude an individual funding contract with their respective national/regional funding institution. This may mean that partners of a successful proposal will have to submit an additional application to their national/ regional funding institution to receive their funding.

6. Project implementation and reporting

Each consortium funded in the frame of the present EU-LAC Joint Call must sign a **Consortium Agreement** listing the rights and responsibilities of each project partner (page 6 f, section 2.3.1). Depending on the nature of the funded project, special regulations should be included in the Consortium Agreement regarding **Intellectual Property Rights**. Scientific and technological results and any other information derived from the project can be announced, published or commercially exploited with the agreement of the partners of the funded projects and according to the national/regional regulations as well as international agreements concerning intellectual property rights.

The following regulations will apply to all projects that are funded in the frame of the present EU-LAC Joint Call:

- In any publication of results, mention must be made that the project was realized within the framework of the EU-LAC Interest Group. The EU-LAC Interest Group logo and the internet address: https://www.eucelac-platform.eu should also be shown on the publication.
- Funding recipients must ensure that all outcomes (publications, etc.) of funded projects include a proper acknowledgement of the EU-LAC Interest Group and the respective national/regional funding partner organizations.

The coordinators of the funded projects will be requested to send the consortium agreement to the EU-LAC Call Secretariat, latest on the day their project starts officially.

Individual reporting to the national/regional funding institutions might be necessary depending on national/regional regulations.

The progress and final results of each individual contract/letter of grant will be monitored by the respective national/regional funding organizations.

7. Time schedule for the 4th ERANet-LAC Joint Call

Publication of the Call for Proposals	Monday, 24th January 2022
Deadline for proposal submission	Thursday, 28th April 2022 (17.00 CEST)
Eligibility check: International and national as well as technical feasibility check of proposals	Starting with the submission of the proposals, ending 12th May 2022
External evaluations	Ending 15th July 2022
Scientific Evaluation Committees' meeting (ranking of proposals)	Before 15th September 2022
Meeting of funding parties to decide which proposals will be funded	Before 30th September 2022
Information of applicants about the results of the evaluation	Before 14th October 2022
Preparation of national/ regional funding contracts/funding decisions	October - December 2022
Start of projects	December 2022 – February 2023
Provision of Consortium Agreement to the Call Secretariat	Upon official project start
Maximum duration of projects	36 months

Annex 1: Detailed formulation of research topics for the 4th EU-LAC Joint Call

1. **GLOBAL CHALLENGES**
   - 1.1. Global Challenges I - EU-LAC Cooperation: Interactions and integration between the climate science, SSH and other communities
   - 1.2. Global Challenges II / Cross-cutting digital Research Infrastructure for targeting social problems

2. **HEALTH**
   - 2.1. Health I – EU-LAC Cooperation in Personalised Medicine
   - 2.2. Health II - EU-LAC Regional Hubs: Integrating research infrastructures for Health and Disease

3. **BIODIVERSITY**
   - 3.1. Biodiversity and Ecosystem Services Research Infrastructures

4. **ENERGY**
   - 4.1. Interoperability of energy data spaces for an optimized exploitation by producers and prosumers / Research Infrastructures

Thematic Area 1: GLOBAL CHALLENGES

Topic 1.1 Global Challenges I
Title: EU-LAC Cooperation: Interactions and integration between the climate science, SSH and other communities

Why is this area relevant and which societal challenges does it address?	According to the results of a series of workshops carried out under the umbrella of the *Flagship Action for Latin America* supported by the SINCERE[1] action, one of the greatest challenges for bi-regional cooperation on Global Change is the integration of Social Sciences and Humanities with climate science, including impacts and relationships with other communities (such as the biodiversity, among others). Adaptation and management of multi-scale environmental changes can only be effectively addressed from a comprehensive and integrated approach that encompasses all relevant actors, systems, and points of view. Aspects of SSH are generally viewed in natural science studies only as boundary conditions rather than as a driving force in systems transformation; this is precisely the kind of approach this call is pursuing.
Added value gained from EU-LAC cooperation for both regions	According to the results of the mentioned *Flagship Action for Latin America*, in addition to the general challenge previously exposed (SSH integration), the reduction of uncertainty, the management of disasters and extreme events and a more precise regional development of IPCC scenarios are the research priorities of the joint EU-LAC scientific community. This call focuses on how the integration of SSH and climate science can contribute to these three scientific priorities. First, the integration of SSH is necessary to reduce uncertainty, which is not only related to climate projections. For example, uncertainty can be reduced by improving the methodology for assessing vulnerability in different social contexts, promoting citizen science, through research on the participatory process applied to social transformation for adaptation and mitigation of climate change including trade-offs associated, barriers and facilitators (e.g., behavior of producers and consumers in terms of adaptation and mitigation), among others. Second, the management of disasters and extreme events requires that the integration of SSH consider, among others: migration and displacement-related aspects, fostering the adoption of the early warning system, the study of impacts and adaptation in heavily populated coastal areas, insurance-related aspects, socioeconomic impacts in general, and the resilience and recovery of communities in general or by sector (for example, energy, biodiversity, health, etc.), also in relation with education level and scientific disposition and susceptibility of communities. Third, the EU-LAC community needs to exploit its diversity and seeks to translate it into more detailed IPCC regional scenarios, to advance a more precise consideration of climatic and socio-economic differences between regions, regional/national perspectives within the global context, regional intra-specificities, and some key sectoral characteristics. The examples provided here are not exhaustive, so other efforts to integrate SSH and climate science are welcome.
Expected impact for both regions	The integration of the SSH aspects implies reinforcing existing links and establishing new ones between individual researchers, research teams, institutions, and users within and between both EU and LAC communities. In

[1] SINCERE "Strengthening INternational Cooperation on climatE change REsearch" is a Coordination and Support Action (CSA). SINCERE aims to strengthen the delivery of the JPI Climate Strategic Research and Innovation Agenda (SRIA). SINCERE has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 776609.

	turn, links' reinforcement enhances the collaboration and improves the coordination and coherence of future actions. Also, the integration of social components from project design and motivation to implementation and assessment of results is a priority within the European Research Area (see for instance the orientation of the Mission Adaptation to Climate Change including Societal Transformation) as it is considered a crucial requirement for the transformation to a sustainable future under global change to be effective. Therefore, integration of SSH with the three priority topics identified as main gaps for progress by climate science community allows to expect a high impact for both EU and LAC regions and their future collaboration.

Topic 1.2 Global Challenges II – Research Infrastructures
Title: Cross-cutting digital Research Infrastructure for targeting social problems

Why is this area relevant and which societal challenges does it address?	More data and larger models and datasets drive the need for larger computers. On top of these demands, there are new algorithms to compute on this data such as Artificial Intelligence (AI), including machine learning and deep learning. The Davos agenda 2021[2] emphasizes that society's data needs are set to grow, as data increasingly informs our actions, so high performance computing (HPC) systems can help us understand and apply this data. In this sense, it is crucial that we democratize access to them so that more groups and organizations can realize the benefits targeting all of the identified societal challenges (let's say, clusters in Horizon Europe): Health; Culture, creativity, and inclusive society; Civil security for society; Digital, industry, and space; Climate, energy, and mobility; and, Food, bio economy, all-natural resources, agriculture, and environment (water, air, soil). A cross-cutting digital Research Infrastructure (RI) based on HPC and data services in which AI capabilities can be applied is fully multidisciplinary and allows addressing every societal challenge.
Added value gained from EU-LAC cooperation for both regions	This Call aims at providing trans-national access (on-site or remote) and/or virtual access to an integrated digital RI service settled in both regions; training to EU and LAC scientists and technicians for using the RI; and activities to improve, customise and harmonise the services of the RI. In this way, project results are expected to contribute to the following expected outcomes: • Wider, simplified, and more efficient access to the cross-cutting digital RI available to researchers; • Breakthrough and leading-edge research enabled by the advanced RI services; • Improved and harmonised RI services and broader use of RI resources across EU and LAC; • A new generation of researchers trained to optimally exploit all the essential tools for their research; • Cross-disciplinary fertilisations and a wider sharing of information, knowledge and technologies across scientific fields fostered by closer interactions between EU and LAC researchers active in and around the RI; • Better management, including implementing FAIR data principle and data management (and related ethics issues), interoperability, as well as the connection of digital services (e.g. data services) to the European Open Science Cloud, should be addressed; • Real and effective connection and cooperation with other major RIs

[2] https://www.weforum.org/events/the-davos-agenda-2021

	operating in the EU-LAC regions, fostering synergies
Expected impact for both regions	Several specific impacts are pursued through this call: - Improvement of EU-LAC international research cooperation and even industrial communities: the funded project(s) can be the seed for the development of a realistic HPC+BD+AI research cooperation roadmap with clearly identified application areas, hardware/system requirements, and funding schemes. - Improvement of sharing of information and expertise to solve common societal problems with the use of advanced computing, data analytics and AI, identifying social problems of interest to both regions and transferring knowledge on programming models, tools, algorithmic and modelling techniques, numerical methods, AI techniques, etc. Digital transformation and services are topics in which both EU and LAC provide advanced skills and could drive to a successful cross-fertilisation outcome. - The training activities will be crucial for the sustainability and empowering of a new generation of scientists and technicians that will have to face a digital transformed world.
Additional information	***What is being pursued?*** Breakthrough and leading-edge research enabled by the advanced RI services (HPC, data science and analytics, artificial intelligence) made available to a wider user community, allowing them to freely exploit those RIs for solving societal problems. ***Potential partnership*** The EU-LAC ResInfra[3] project has identified a list of key actors in EU and LAC for achieving HPC sustainability. They could form the seed for creating a solid consortium, in which Latin American countries would be highly represented. ***Impact*** New science in societal problems solved by EU+LAC joint groups using digital capabilities, free access to the most advanced RIs by a wider set of research groups, training activities, two-way transfer of knowledge by means of secondments, ***Activities to be funded*** Secondments and research visits, training activities, communication and dissemination events (for engaging stakeholders). No funds for infrastructure procurement, but some allocations of funds for co-funding the administrators' salaries. ***Infrastructure(s) to be exploited*** Data centres hosting computing and storage servers and infrastructure (see PRACE, SCALAC, etc.); S&T infrastructures (see LifeWatch ERIC, ICOS ERIC[4] for example) exploiting the former; Geant and RedCLARA for connecting RIs and final users.

[3] https://resinfra-eulac.eu/about/

[4] ICOS ERIC - Integrated Carbon Observation System, European Research Infrastructure Consortium" https://www.icos-cp.eu/

Thematic Area 2: HEALTH

Topic 2.1 Health I
Title: EU-LAC Cooperation in Personalised Medicine

Why is this area relevant and which societal challenges does it address?	Personalised medicine (PM) is an innovative health area that has a high potential benefit for patients, citizens and health systems. The main goal for PM is prevention, diagnosis and treatment of diseases by taking into account individuals' genotypes and phenotypes as well as other biomedical, life style and environmental data. This will enable to tailor the right therapeutic strategy for the right person at the right time and/or to determine the predisposition to disease, providing targeted prevention strategies. However, even if major progress in this field has already been achieved through many international initiatives and research funding efforts, further promotion at global level of the PM implementation in healthcare systems still remain, as well as ensuring an equity access to the developed personalized therapies. Personalised medicine (PM) is an innovative health area that has a high potential benefit for patients, citizens and health systems. The main goal for PM is prevention, diagnosis and treatment of diseases by taking into account individuals' genotypes and phenotypes as well as other biomedical, life style and environmental data. This will enable to tailor the right therapeutic strategy for the right person at the right time and/or to determine the predisposition to disease, providing targeted prevention strategies. However, even if major progress in this field has already been achieved through many international initiatives and research funding efforts, further promotion at global level of the PM implementation in healthcare systems still remain, as well as ensuring an equity access to the developed personalised therapies.
Added value gained from EU-LAC cooperation for both regions	Pre-clinical and clinical research combined with bioinformatics and data technologies focused on demonstrating the potential and clinical feasibility of personalised medicine in different diseases (personalised medicine is non-specific disease; therefore, research on every disease is encouraged). This could include the application and validation of known biomarkers in clinical practice, the development of diagnostic and clinical decision support tools, the stratification of patients and the prediction of response of the patients to personalised specific therapies, the use of genomics, machine learning and data integration to provide more personalised treatments, the gathering of toxicity and toxic-kinetic information (ecotoxicological studies) in order to allow characterising all risks to human health even by setting up in vitro and in vivo models, etc. Only small-scale exploratory clinical studies can be supported. A multidisciplinary transnational approach should be addressed, with the possibility to tackle further PM-related items, such as Health-economics or Ethical, Legal and Social aspects that arise in the conducted research. The proposals should include one or several of the following aspects: • Transnational and regional collaboration as added-value • Use of research infrastructures (e.g. biobanks, genomic databases, DNA sequencing facilities, etc.) • Use of both internationally recognized biomarkers and those that are exclusive to LAC populations • Engage professionals from different disciplines • Data management services to collect, maintain, analyse and use PM data and information.

Expected impact for both regions	Project proposals must clearly demonstrate the potential and clinical feasibility of personalized medicine in different diseases. The scientific evidences obtained in the projects will contribute to support PM credibility as well as will potentiate future EU-LAC research by the development of EU-LAC collaborative clinical and research networks. The performed research will serve to promote the PM clinical application and implementation in EU-LAC health-care systems.

Topic 2.2 Health II

Title: EU-LAC Regional Hubs: Integrating Research Infrastructures for Health and Disease– Research Infrastructures

Why is this area relevant and which societal challenges does it address?	Increasingly complex global issues are challenging our societies, revealing how urgently global development of research capacities is needed. Structural Biology and Bioimaging have become two of the main pillars on which modern research currently stands in the fields of Life Sciences, Biomedicine and Biotechnology. Both areas are undergoing technological revolutions enabling researchers to address scientific questions that were unimaginable even a few years ago and opportunities are becoming available at a fast pace, anticipating tremendous impact in drug discovery, diagnostic tools development and efficacious novel vaccines. Proactive and continued activities have consolidated strong links between Latin America and Europe, activities supported inter alia by Horizon 2020 projects, namely EU-LAC ResInfra[5], RI-VIS[6] and Global BioImaging. Key to the success of this collaboration is both regions' shared vision: they contribute with excellent science and with the building of sustainable Research Infrastructures and partnership mechanisms. Among high priority matters it seems clear that infectious diseases, cancer and drug development are particularly relevant, especially considering that LAC is a cornerstone regarding global biodiversity and alien species spread in the context of the One Health concept.
Added value gained from EU-LAC cooperation for both regions	EU initiatives such as ESFRI[7], have proved extremely useful in establishing a solid and efficient Research Infrastructure (RI) landscape in Europe. Although a regional plan to organise and develop RIs in LAC is still in its early stages, for global actions to be effective, the EU and LAC need common standards and a defined set of shared capacities. Open access to users is one of the crucial factors for RIs to be efficient. This call would thus launch a **Regional Hub** while also entrusting it with the task of replicating the model through a coordinated plan with other hubs, as a seed for a coherent, strategy-led approach to policy-making on RIs in LAC. This call should contemplate seed/matching funds to establish a first Regional Hub; planning for instrumentation, first period staffing, and dedicated support for the coordination of a regional network. The location of these Regional Hubs should also be planned, prioritising scientific excellence of active LAC centres and a proven track record of open access and networking commitment. Embracing actions of FAIR data might be one of the best legacies of this EU-LAC call: A Regional Hub of Integrative Bioimaging establishing FAIR data principles would set up a model to guide a growing network of LAC Regional Hubs with reliable quality and data openness standards.

[5] https://resinfra-eulac.eu/about/
[6] https://ri-vis.eu/network/rivis/home
[7] https://www.esfri.eu/about

Expected impact for both regions	Joint development in these areas would benefit both parties enormously, as it will i) help the LAC partners to strengthen local capacities incorporating cutting-edge technologies; ii) allow the European infrastructures to enlarge their user base; and iii) boost science in both regions through scientific collaborations launched on the basis of common data sharing standards. The resulting project will be bound to converge towards a fully operative Regional Hub of Integrative Bioimaging RI, which shall become a pilot project for similar regional centres in LAC in other thematic areas. This first Regional Hub will catalyse bi-regional synergic research in Health and Disease, within a One Health perspective. This synergic collaboration anticipates huge positive impact closing the gap between the molecular and cellular scales, to understand complex biological processes related also to biodiversity and ecological functionality, and conceive beneficial applications in the areas of Health, Biology and Biotechnology and Natural Sciences in general.

Thematic Area 3: BIODIVERSITY
Topic 3.1 Biodiversity and Research Infrastructures

Title: EU-LAC Cooperation: integrating research infrastructures for Biodiversity and Ecosystem Services

Why is this area relevant and which societal challenges does it address?	Adaptation and management of multi-scale environmental changes can only be effectively addressed from a comprehensive and integrated approach that encompasses all relevant actors and systems. When approaching Natural systems and how societies are coupled to the existing physical conditions, we need to integrate concepts such as carrying capacity, resilience, ecological functionality, etc. Considering the climate change as major pressure on natural systems that inevitably generates an evolution and adaptation of the ecosystems, and therefore their overall Biodiversity, it´s necessary to provide light, certainty and future scenarios to which societies will need to adapt. The Ecosystem Services Framework (ESF) provides the means to orientate scientist, practitioners, policymakers and governments to effectively account for Biodiversity and Ecosystem Services (BES) within the economy[8] informing the development of economic policies, market-based mechanisms, fiscal incentives, regulatory frameworks, etc. under different predicted by both IPCC and IPBES (The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services) Climate Change Scenarios. Supporting the creation of a management model and planning process suitable to be adapted to a whole range of situations as scale, stakeholders, ecosystem services, socioeconomics, divers of degradation, culture and regulatory frameworks that will assist to effectively generate incentives for adaptation and sustainable development of regions. In that sense, LifeWatch ERIC[9], the E-Science European Research Infrastructure on Biodiversity and Ecosystem Research[10], is considered on the top of the GBIO framework[11] Research Infrastructures addressed to understand biodiversity and related-ecosystem evolution, being based on scientific evidences and in turn,

[8] The Economics of Ecosystems & Biodiversity http://teebweb.org/

[9] What is ERIC? https://ec.europa.eu/info/research-and-innovation/strategy/strategy-2020-2024/our-digital-future/european-research-infrastructures/eric_en. ERIC Forum https://www.eric-forum.eu/

[10] LifeWatch ERIC https://www.lifewatch.eu

[11] "Facing e-Biodiversity Challenges Together: GBIO framework-based synergies" https://doi.org/10.3897/biss.3.38554

	FAIR (Findable Accessible Interoperable Reusable) data and e-Services, in tightly collaboration with the European Open Science Cloud (EOSC)[12], by means of the use of the "state-of-art" of ICT (Big Data, AI-Machine-Deep Learning, Blockchain and semantic technologies). In fact, LifeWatch ERIC is supporting the so-many Biodiversity Communities-of-Practice stakeholders present in the EU-LAC scenario to foster the accomplishment of research, but also Sustainable Development Goals through the EU-LAC cooperation, more specifically, through the ResInfra project LifEULAC pilot case study.
Added value gained from EU-LAC cooperation for both regions	The Ecosystem Services Framework (ESF) is considered a policy solution capable of realigning the private and social use of Natural Capital under the predicted IPCC climate change scenarios. To generate an (ESF) EU-LAC framework is necessary to enable modeling through the use of Virtual Research Environments (VRE) to predict fluctuations based on the provision of the ES due to changes of environmental factors induced by natural processes, land use, regulations. and climate change, helping scientific community, policymakers, businesses and civil society to drastically increase their knowledge on the management, use and value of natural resources (including ES), apply nature-based solutions for their management and improve their approach in developing efficient solutions towards climate resilient and sustainable communities based on an efficient use of natural resources and an effective adaptation strategy. An example may be the adaptation to temperature increase with sustainable green infra-structure cooling solutions (i.e., green roofs, green walls) that decrease energy demand, reduce fatalities during heatwaves and decrease of the heat island effect in urban environment. A common challenge for both EU and LAC regions is how to provide resilient agricultural, forestry and fisheries systems to meeting significant increases in our food needs of the future while ensuring no one is left behind. The ESF can help to define proper policies and sustainable management practices, also based on a Nature-based solutions approach, to ensure the provision of those ecosystem services and ensuring quality, quantity and safety of food, by also taking into consideration the so-called indigenous knowledge on Biodiversity and environmental management, as lately stated in the last UN General Assemblies[13]. Predicting how the provision of ecosystems services will evolve under different climate change IPCC and IPBES management scenarios would inherently facilitate to government the much-needed planning strategy to maintain required levels of Natural Capital as an important fraction of the capital base of the EU-LAC. This call focuses on how the integration of ESF and climate science & biodiversity can contribute to build sustainable climate & biodiversity resilient communities through the following prioritized areas of work: a) Development of initial climate & biodiversity-oriented Ecosystem Services Framework: design of a preliminary operational model to provide a coherent structure and relationship between the principles, concepts, and processes, to help practitioners and researchers to conceptualize and direct their work. b) Building new knowledge and deeper understanding of taxonomical and functional biodiversity responses to climate changes, towards the development of digital twins of biodiversity patterns in future

[12] https://ec.europa.eu/info/research-and-innovation/strategy/strategy-2020-2024/our-digital-future/open-science/european-open-science-cloud-eosc_en

[13] https://www.un.org/en/academic-impact/we-are-indigenous-addressing-global-challenges-indigenous-knowledge

	ecosystems. c) Provide and integrate existing data on soil microbial diversity associated to agricultural and rural ecosystems: characterize biological community-aggregate traits to be used as soil quality indicators and monitor and assess the vulnerability of soils to climate change. d) Collect information about recent and past associated microbial communities (plant holobionts) to study their responses to environmental changes and identify and predict how plant and microbial biodiversity can affect the resilience of agricultural and rural systems to climate changes and emerging diseases. e) Research of natural systems under predicted IPCC & IPBES climate change & biodiversity scenarios: predict how changes in the environmental factors and ecological structure can affect the stability, therefore the provision, of ES stocks and flows and ultimately the value of Natural Capital. Identifying the biophysical elements and ecological processes involved in the delivery of the targeted ecosystem services. f) Highlight the diversification of human food sources derived from Natural Capital to improve fair distribution of economic profits to alleviate poverty in marginal communities and maintain local and traditional biocultural heritages. g) Building a climate & biodiversity-oriented Ecosystem Services Framework will provide robust tools for the identification of priority conservation areas, establishing a long-term effective and resilient ecological network, which will enhance biodiversity protection at different levels. h) Research economic approaches to balance tradeoffs and incentive the preservation of Natural Capital and ecological functionality coupled to the Maximum sustainable yield of the Climate adapted natural systems. i) Drafting standards and best practices of Environmental policies and regulatory frameworks. As a handbook to guide policymakers, scientists, and practitioners to pursue measures that have previously been tested and validated in the VRE´s. In fact, the achievement of sustainable climate resilient Communities-of-Practice needs the active participation of the different actors and the involvement of LifeWatch ERIC through multi-actor approaches. It implies adopting a transdisciplinary and multi-actor approach by involving the society and fostering open innovation through Living Labs and other related initiatives. This will be achieved by means of the use of these VREs and the (on-going) creation of a EU-LAC Biodiversity Knowledge & Networks Repository, in tightly collaboration with the ResInfra project pilots (in particular the RICAP pilot case study), the EuroHPC [14], and the above-mentioned EOSC, among other outstanding stakeholders.
Expected impact for both regions	The integration of the ESF implies reinforcing existing links and establishing new ones between individual researchers, research teams, institutions, INNOVATORS (including private companies, large & SMEs, entrepreneurs, etc.) and users within and between both EU and LAC communities[15]. Additionally, it builds up capacity and knowledge towards making both regions resilient under predicted Climate Change Scenarios while integrating the unique social, cultural and natural features of every EU-LAC to provide support and to inform policy

[14] https://eurohpc-ju.europa.eu/

[15] https://ec.europa.eu/info/research-and-innovation/strategy/strategy-2020-2024/europe-world/international-cooperation/latin-america-and-caribbean_en

	frameworks for socioeconomics and societal change. This topic is therefore able to generate a high impact for both EU and LAC regions, at the same time that their shared Biodiversity Knowledge & Networks Repository is consolidated.
Additional Information Strategic, Tactical and Operational topics	**Strategic acronym STR-LIFECELAC**: Topic addressed to the establishment of experts and decision makers advisory boards on Biodiversity and Ecosystem Research & Sustainable Management Services, to be put in relation with the upcoming European Union Neighborhood Development and International Cooperation Instrument -NDICI-. **Tactical acronym TAC-LIFECELAC:** Topic addressed to the assessment, identification and engagement of "commons" among existing EU-LAC Communities-of-Practice and related networks: GBIF, I3B, Recibio, ERA-Net, BIODIVERSA, CoopBioPlat, BioDivScene, Belmont Forum, etc. among other initiatives. **Operational acronym OPE-LIFECELAC:** i. Development of activities related to climate & biodiversity-oriented Ecosystem Services Framework identifying the biophysical elements and ecological processes involved in the delivery of the targeted ecosystem services. These activities will be performed in tightly collaboration with the establishment of 2+1 LifEuLAC Co-located offices, initially in Costa Rica, Uruguay and Andalusia region (Spain). ii. In relation to previous item, EU NDICI activities development in relation to cooperation on e-Biodiversity & Climate Change in the context of EU Green Deal and SDG 2030, carried out synergistically jointly with the European Open Science Cloud -EOSC-, United Nations Office for Outer Space Affairs -UNOOSA-, and Organisation for Economic Co-operation and Development -OECD-: In particular, in relation to the recently launched Indigenous Knowledge Research Infrastructure -IKRI- under the umbrella of United Nations -UN-. iii. Development of activities to enrich the so-called LifEuLAC Knowledge Space to foster exchange of EU-LAC practices on the matter. iv. Development of sustainability and circular economy-related activities: E.g. consolidation of EcoBioCalli actions on "Vivienda Sustentable" (Sustainable homes & housing) in 9 LAC, at the moment: Argentina, Brasil, Chile, Costa Rica, Dominican Republic, Ecuador, Guatemala, México and Nicaragua. v. Co-design of contents for media channels for dissemination purposes (e.g. TWITCH, etc.). vi. Activities of e-Research collaboration at physical, face-to-face, and virtual levels for the exchange of researchers, complemented by the use of the digital passport based on LifeBlock (chain) technologies in collaboration with RITrainPlus project. vii. Research on taxonomical and functional biodiversity responses to climate changes supporting the development of low uncertainty biodiversity change scenarios in future ecosystems. viii. Research on socio-economic approaches to balance tradeoffs between economic growth and environmental impact. ix. Research of natural systems under predicted IPCC & IPBES climate change & biodiversity scenarios. x. Drafting standards and best practices of Environmental policies and regulatory frameworks.

	Therefore, the **activities expected to be funded are:** research work, workshops and expert meetings, data integration and development of models and tools. **Potential partners:** Those which compose the so-called "quadruple helix" of Innovation (Pór, 2005): Academy, Policy Makers, Industry (SMEs and big companies, Entrepreneurs), SSH (Social Science & Humanities)-Civil Society, i.e., without neglecting the role of NGOs and citizen science activities either, under the umbrella of Innovation activities being Research Infrastructures allocated at the center as structuring tool according to ERA and EU-CELAC objectives.

Thematic Area 4: ENERGY
Topic 4.1 Renewable Energies

Title: Interoperability of energy data spaces for an optimized exploitation by producers and prosumers

Why is this area relevant and which societal challenges does it address?	There is a clear relation between energy consumption and climate change that was firstly claimed by the Intergovernmental Panel on Climate Change First Assessment Report (IPCC AR1)[16]. Thus, it is urgently needed to address the double challenge of climate change mitigation and adaptation, so the fight against climate change is central to the United Nations Sustainable Development Goals. In this sense, goal SDG7 focuses on affordable and clean energy, but nowadays, market availability of highly competitive clean technologies (notably, onshore wind and PV)[17] is not sufficient on its own to drive the Clean Energy Transition (CET). Solutions must be adopted worldwide to become efficient and citizens must be an active part of the new energy market as prosumers, so the first step is to enable common energy data spaces that will made data available and re-usable, which is key when optimizing the energy mix coming from renewable energies. Technological solutions for achieving a higher degree of interoperability between energy data platforms is needed, but the SINCERE Action[18] demonstrated that one of the greatest challenges for bi-regional cooperation on Global Change is the **integration of SSH with climate science in order to make society an active actor in the coming decentralized energy market.**
Added value gained from EU-LAC cooperation for both regions	This call pursues to embrace technological and SSH advances as a real driving force in the energy system for a CET encompassing all relevant actors, systems, and points of view. According to the results of SINCERE for Latin America and to the results of a series of cooperation activities carried out under the umbrella of the H2020 project EU-LAC ResInfra[19], a more precise regional development of IPCC scenarios is one of the research priorities of the joint EU-LAC scientific community. CET clearly needs of a proper exploitation of a coming decentralized energy market based on geographical distributed renewable energy sources. To do so, the first action is to create a **RI based on interoperable energy data space** in which providers and prosumers will be able to optimize generation, distribution,

[16] IPCC First Assessment Report Overview and Policymaker Summaries and 1992 IPCC Supplement https://www.ipcc.ch/report/ar1/syr/

[17] IEA: Levelised cost of electricity https://www.iea.org/articles/levelised-cost-of-electricity-calculator

[18] http://www.jpi-climate.eu/sincere/wp4

[19] ResInfra pursues the construction of a bi-regional collaboration between European Union and the LAC countries, envisaging a range of different activities that will contribute to this aim, https://resinfra-eulac.eu/about/

	and final usage of energy. Based on FAIR principles specifically designed for the energy sector, project results are expected to contribute to the following expected outcomes in common data spaces hosted in Europe and Latin America: • Higher degree of interoperability between data platforms in both regions • Energy data made available and re-usable • Demonstrated implementations of energy data spaces, exploiting open standards related to data-packages, interfaces, protocols, platforms, and procedures • Value systems - Understanding Customers. The resulting common RI between Europe and Latin America will have to provide features such as interfaces for the exchange of information (i.e. APIs, connectors), interoperable open standards, or protection of personal data, cybersecurity and data rights. Also, to demonstrate that this pilot interoperable renewable energy data space promotes a strong availability and cross-sector sharing of data, in a customer-centric, secure and trustworthy manner. Finally, a full integration between the technological developments resulting in the RI and how it is better exploited as a result of the SSH activities in both regions should be documented as well.
Expected impact for both regions	Links' reinforcement between both EU and LAC communities enhances the collaboration and improves the coordination and coherence of future actions in a global challenge as climate change and CET are. In this sense, a transformation to a sustainable future under global change will only be effective if common solutions and objectives are pursued in both regions for a CET and, additionally, the coming renewable energy decentralized market encompasses providers and consumers. Common energy data spaces are the first pillar upon which build future advances in this topic also by means of an increased acceptance and participation of consumers on data sharing for energy services.
Additional information	***What is being pursued?*** A common energy data space infrastructure designed with common (meta)data standards and FAIR principles. ***Potential partnership*** EU and LAC: technological institutions with expertise on data curation and FAIR principles; data providers coming from both regions; major energy related initiatives for integrating stakeholder's involvement (see EERA, for example); centres with expertise on the SSH impact of energy. ***Impact*** This common energy data space RI is needed for actually achieving a distributed energy system based on renewable energies in which prosumers will be a reality. ***Activities to be funded*** Staff to develop and integrate those energy data spaces that will exploit open standards related to data-packages, interfaces, protocols, platforms, and procedures, secondments and research visits, dissemination events (for engaging stakeholders and general public). Some funds for storage and computing servers could be allocated as well. ***Infrastructure(s) to be exploited*** Data centres hosting the energy data spaces; S&T infrastructures providing data exploiting the former; Geant and RedCLARA for connecting RIs and final users.

Annex 2: List of LAC Research Infrastructures (RI) for related topics and where to find information on EU RI.

The H2020 project EU-LAC ResInfra has provided the following list of LAC RI. It is one of the project public deliverables, result of the work performed by the consortium members.

The list is provided for information and to help proposers when looking for potential RI in Latin America and Caribbean countries to participate as consortium members. The RIs have been classified per country and area of expertise.

GLOBAL CHALLENGES

COUNTRY	RESEARCH INFRASTUCTURE	RI ACRONYM
BARBADOS	Caribbean Agricultural Research & Development Institute	CARDI
	Caribbean Institute for Meteorology & Hydrology	CIMH
BRAZIL	Mamirauá Sustainable Development Institute	IDSM
COLOMBIA	CEPASS Corporation	
	Institute of Biotechnology-National University	IBUN
	Institute of Hydrology, Meteorology and Environmental Studies	IDEAM
	Institute for Science and Food Technology	INTAL
COSTA RICA	Environmental Pollution Research Center	CICA
	National Institute for Innovation and Transfer of Agricultural Technology	INTA
	National Center for Food Science and Technology	CITA
ECUADOR	National Institute of Agricultural Research	INIAP
	National Fishery Institute	INP
PANAMA	Agricultural Innovation Center	IDIAP

HEALTH

COUNTRY	RESEARCH INFRASTUCTURE	RI ACRONYM
BARBADOS	George Alleyne Chronic Disease Research Centre	CDRC
BRAZIL	Unidade de Pesquisa e Produção de Radiofármacos	UPPR
COLOMBIA	Research Center of the Cardiovascular	

	Foundation of Colombia	
	National Institute of Health	
	Institute of Genetics	
PANAMA	Gorgas Memorial Institute for Health Studies	ICGES
URUGUAY	Preclinical Research Infrastructure	CUDIM
	Instituto Pasteur-Transgenic and Experimental Animals Unit	IP Montevideo

BIODIVERSITY

COUNTRY	RESEARCH INFRASTUCTURE	RI ACRONYM
BOLIVIA	Institute of Ecology, Universidad Mayor de San Andrés	IE-UMSA
	Center for Biodiversity and Genetics	CBG
COLOMBIA	CEPASS Corporation	
	INSTITUTO SINCHI	SINCHI
	Information System on Biodiversity of Colombia	SIB COLOMBIA
ECUADOR	National Meteorological and Hydrological Institute	INAMHI
MEXICO	Instituto de Ecología, A. C.	INECOL
	Center for Scientific Research and Higher Education at Ensenada, Baja California	CICESE
PANAMA	Coiba AIP Scientific Station	COIBA AIP

ENERGY

COUNTRY	RESEARCH INFRASTUCTURE	RI ACRONYM
BARBADOS	Caribbean Agricultural Research & Development Institute	CARDI
BRAZIL	Electric Energy Research Center	CEPEL
CHILE	Centro de Excelencia en Geotermia de Los Andes	CEGA
COLOMBIA	Corporation Center for innovation and technological development of the electricity sector	CIDET
	Gas Technology Development Center Corporation	
COSTA RICA	Research Center in Atomic, Nuclear and Molecular Sciences	CICANUM
ECUADOR	National Institute for Energy Efficiency and Renewable Energies	INER
MEXICO	Centro de Ingeniería y Desarrollo Industrial	CIDESI
PANAMA	Electrical, Mechanical and Industry Research and Innovation Center, Technological University	CINEMI

MULTIDISCIPLINARY

COUNTRY	RESEARCH INFRASTUCTURE	RI ACRONYM
BRAZIL	Northeast Strategic Technologies Center	CETENE
	National Institute of Amazon Researches	INPA
	National Institute for Technology	INT
	National Institute for Semi-Arid	INSA
	Nacional Observatory	ON
	Instituto Alberto Luiz Coimbra de Pós-Graduação e Pesquisa de Engenharia	COPPE/UFRJ
COLOMBIA	Corporation for Biological Research	CIB
	AGROSAVIA	
COSTA RICA	Natural Products Research Center	CIPRONA
MEXICO	Centro de Investigación y Asistencia en Tecnología y Diseño del Estado de Jalisco, A. C.	CIATEJ
	CentroGeo research and technology infrastructure	ITICentroGeo
	Centro de Investigación y Desarrollo Tecnológico en Electroquímica, SC.	CIDETEQ
PANAMA	Institute of Scientific Research and High Technology Services	INDICASAT AIP
URUGUAY	Clemente Estable Biological Research Institute	IIBCE
	Technological Pole Institute of Pando	IPTP
	Latitud - LATU Foundation	LATITUD

Additional information on LAC RIs:
Mapping of RI in CELAC countries: https://celac.d2c2.gub.uy/en/home-page/
Brazil: National Research Infrastructure Platform MCTI (2020). https://pnipe.mctic.gov.br

EUROPEAN RESEARCH INFRASTRUCTURES:

The European Commission and ESFRI encourage Member States and Associated Countries to develop national roadmaps for research infrastructures (RIs). The following link gives access to the national roadmaps: https://www.esfri.eu/national-roadmaps.

Annex 3: Overview of funding by the participating funding organizations to each topic

#	Country	Funding Agency	*1.1 Global Challenges I - Interactions and integration between the climate science, SSH and other communities*	*1.2 Global Challenges II / Cross-cutting digital research infrastructure*	*2.1 Health I - Personalised Medicine*	*2.2 Health II - EU-LAC Regional Hubs: integrating research infrastructures for Health and Disease*	*3.1 Biodiversity and Ecosystem Services Research Infrastructures*	*4.1 Interoperability of energy data spaces for an optimized exploitation by producers and prosumers / Research Infrastructures*	Total in €
1	Austria	BMBWF	X	X	X	X	X	X	200,000
2	Bolivia	MINEDU	X	X	X	X	X	X	[20]
3	Brazil	CNPq	-	40,000	80,000	-	80,000	-	200,000
4	Brazil	CONFAP	X	X	X	X	X	X	Budget[21]
5	Dom. Rep.	MESCYT	X	X	X	X	X	X	200,000
6	Germany	DLR/BMBF	X	X	X	X	X	X	1.000,000
7	Italy	CNR	-	-	X	X	X	-	150,000
8	Panama	SENACYT	X	X	X	X	X	X	177,000[22]
9	Peru	CONCYTEC	-	-	-	200,000	200,000	-	400,000
10	Poland	NCBR	300,000	-	300,000	-	-	-	600,000
11	Portugal	FCT	-	-	-	300,000	-	-	300,000
12	Spain	AEI	X	X	X	X	X	X	600,000
13	Spain	ISCIII	-	-	750,000	-	-	-	750,000
14	Turkey	TUBITAK	X	X	X	X	X	X	750,000
15	Uruguay	ANII	X	-	-	X	-	-	44,000[23]

[20] The available budget for project funding will be defined by each Bolivian institution participating in one of the mentioned topics. In Bolivia, universities and research centres dispose of their own financial resources and are free to fund the international projects they consider relevant and according to their individual institutional funding regulations.
[21] The budget for each participating State Funding Agency (FAP) is detailed in the funding regulations of CONFAP under: https://www.eucelac-platform.eu/joint-actions
[22] The amount represents 200,000 US Dollars based on the exchange rate for December 16, 2021, of the European Commission Exchange rate
[23] The amount represents 50,000 US Dollars based on the exchange rate for December 17, 2021, of the European Commission Exchange rate

Annex 4: Contact information, Call Contact Persons

The **Call Secretariat** for the 4th EU-LAC Joint Call is entrusted with the overall operational management of the present Call. It is the general contact point for first questions related to the Joint Call, the application process and the use of the PT Outline webtool.

The **Call Contact Persons (CCPs)** are located in each country which participates in the present Joint Call. One of their main tasks is to advise the potential applicants from their countries/regions on the applicable national/regional regulations during the proposal submission process.

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