

Topic 4: Energy

Title: EU-LAC Cooperation for Energy transition

Why is this area relevant and which societal challenges does it address?

There is an international need to transition from the use of fossil fuels to more sustainable energy sources. This objective, driven by environmental awareness and concern about the depletion of hydrocarbon reserves has begun to be reflected in noticeable changes in the energy matrix of the different countries. The need to opt for less polluting energy sources has made the energy transition a recurring theme on governmental and business agendas that seek to address current challenges in the energy sector. The aim is to replace fossil energy sources, due to their significant impact on accelerating climate change.

Energy transition is a crucial issue in the context of sustainable development. The international community seeks to address global energy challenges to reduce greenhouse gas emissions, improve energy access and promote sustainable development. In this respect, the Sustainable Development Goal 7 of the United Nations Agenda 2030 aims to ensure access to affordable, reliable, sustainable and modern energy for all. This includes promoting renewable energy sources, energy efficiency and universal access to adequate energy services.

Added value gained from EU-LAC cooperation for both regions

The European Union (UE) is investing in clean energies as never before and needs new allies, reliable allies equally committed to the goal of a green and just energy transition. The EU needs to modernize the energy networks to support energy system integration and to integrate other decarbonized and low-emission energy carriers, such as renewable hydrogen and lithium technologies (according to the [Paris Agreement](#)). International problems require international solutions, and Latin-America and the Caribbean (LAC) region is a key and natural partner of the EU in this matter. The EU has been developing for more than a decade an active policy of energetic transition, in support of its efforts to mitigate the effects of climate change. Now the energetic transition is a priority in Europe through the [European Green Deal](#), to make Europe the first continent climatically neutral. The contribution of Latin-American countries to achieve it is essential.

LAC is one of the regions of the world that has been suffering the most from climate change: lost crops, new public health problems, extreme meteorological phenomena, or the proliferation of sixth-generation fires. The energy transition implies both a need and an opportunity for the LAC region. The so-called “lithium triangle”, integrated by Argentina, Bolivia and Chile, represents 60% of the global resources¹. It is also estimated that LAC may produce 12% of green hydrogen demand by 2050².

The EU-CELAC Summit Declaration of July 2023 reflects the need to promote cooperation and coordination on issues of common interest such as climate change and energy security. In this alliance for the energy transition, Europe can learn about how to decarbonize its energy matrix, or how to integrate local communities in the construction of energy infrastructure through participatory

¹ [Latin American Economic Outlook 2022: Towards a Green and Just Transition | Latin American Economic Outlook | OECD iLibrary \(oecd-ilibrary.org\)](#)

² [OEI | Argentina | Publicaciones | El estado de la ciencia: principales indicadores de ciencia y tecnología iberoamericanos / interamericanos 2022](#)

processes; and Latin America and the Caribbean countries can overcome some of the technical and scientific deficits.

Expected impact for both regions

The aim of the 5th Joint Call is to initiate sustainable and multilateral research cooperation between researchers from Europe, Latin-America and the Caribbean countries. In the topic of energy, it is expected that proposals contribute to generate relevant effects on the generation and exchange of knowledge among Europe and LAC to supply solutions for a progressive electrification, integrating decarbonized and low emission energy carriers, especially through renewable hydrogen and biofuel, but not only, so proposals focused on other renewable sources (wind, solar, ...) are also welcome. Consequently, apart from the impacts included on the criteria defined in the call, it is expected that proposals submitted through this topic specifically contribute to:

- Generate innovative solutions oriented to solve problems of local communities and society, promoting climate neutrality and a clean, sustainable, and just transition of the energy sector to advance to a resilient society.
- Improve the knowledge about what are the most viable, useful and urgent possible applications of hydrogen, biofuel and other renewable energy sources.
- Promote policy recommendations and guidelines about energy transition.
- The integration between the EU and LAC is essential to complement strategies, resources and technologies. This integration involves not only technology, but also new models of economic and social links that impact society.
- Create long-term collaboration between European and Latin-American researchers that generate added value to science, research and innovation in the field of energy transition. The transnational dimension of the project should clearly add value, achieving results that would not be reached by researchers from a single country.

Additional information: strategic, tactical and operational topics

Considering this context and objectives, proposals should encourage a multidisciplinary approach, not only focused on the scientific or technical obstacles preventing from a more intensive exploitation of renewable energies. It also aims to take into account the environmental and social dimension of the phenomenon. On one hand, it is essential to consider the social aspect in order to get through to the population. Without this, the needed energy transformation in Europe and LAC will not be achieved. On the other hand, results related to energy transition must be carefully developed to avoid or mitigate environmental impacts.

In addition, according to the SDG 17 (Strengthen the means of implementation and revitalize the Global Partnership for Sustainable Development), projects should be developed through multi-actor operative strategies, engaging relevant stakeholders not only from the academy but also from governments, private sector and civil society. Consortium candidates are strongly encouraged to take into account participatory and co-designed methodologies to carry out their research and innovation projects.

According to the general call, proposals should promote practices and actions that contribute to open science such as the measures contemplated on the [UNESCO Recommendation on Open Science | UNESCO](#). Open science does not only focus on ensuring accessibility to scientific knowledge but also emphasizes the importance of fostering an inclusive, equitable, and sustainable environment in the production of such knowledge. For this reason, [FAIR](#) and [CARE](#) principles should be also considered in the proposal. Finally, gender equality perspective is needed as a structural approach to achieve energy security at national and international level.