CALL FOR RESEARCH PROPOSALS

ENERGY TRANSITION IN LATIN AMERICA AND THE CARIBBEAN

I - Context

Latin America and the Caribbean face a triple challenge: to grow to close the average income gap with respect to developed economies, to reduce inequality, and to protect the environment. Energy is at the intersection of these three challenges.

Energy is an essential input for both firms and households. Problems in the supply of energy, or significant changes in its price, can affect the entire productive system given the centrality of this sector in input-output relations.

Regarding environmental protection, during the 2014-18 period, the energy sector emitted 77% of global greenhouse gas emissions and more than 90% of CO2 emissions[1]. Consequently, substantially reducing greenhouse gas emissions in order to limit the rise in global temperature in this century to between 1.5 and 2°C, in line with the Paris Agreement, demands an energy transformation that includes not only a more efficient use of energy by households, businesses and cities, but also a change in the energy matrix that significantly increases the share of sustainable clean energy.

For 2018, according to data from the World Bank, the fraction of renewable energy in total energy consumption in Latin America and the Caribbean was around 27%; although this value is larger than the world average, located around 18%; it seems insufficient to meet the CO2 emission reduction consistent with environmental goals. Indeed, the RELAC Initiative[2], which to date includes 16 countries in Latin America and the Caribbean, aims at a 70% share of renewable energies in the regional energy matrix by 2030.

This energy transformation implies challenges, but it also offers opportunities. The region has great potential to contribute to the global energy transition from the supply side. On the one hand, it has a great capacity to develop solar and wind energy, in addition to its well-known hydroelectric production capacity. But it can also be an important supplier of "green minerals" that are key to the development of clean energy supply, such as copper, silver, and lithium, among others.

The implications for Latin America and the Caribbean of this inevitable energy transformation process are not yet fully understood. This call for research proposals seeks to contribute to this regard. This call seeks to improve our understanding on how to take advantage of the opportunities and how to overcome the challenges associated to the energy transformation, in such a way as to jointly guarantee the objectives of growth, inclusion, and environmental protection to achieve the integral development of the region.

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[1] Regarding to greenhouse gas emissions, the 42% corresponds to the electricity sector, 22% to transportation and 17% to the manufacturer sector. See IDEAL (2022)

[2] Brochure_RELAC_ES_0.pdf (hubenergia.org)

II – General objective

The current call for projects aims to support research efforts that contribute to a better understanding of the interactions between the energy transition and the objectives of growth, inclusion and environmental protection in Latin America and the Caribbean, emphasizing the policies that favor or hinder these objectives.

III – Topics

A non-exhaustive list of topics which are of interest for the current call is the following:

- Energy transition and its effects on employment
- Fiscal and external sector impact of the energy transition
- Policies and regulations to promote the energy transition (carbon tax, subsidies, auction for renewables etc.)
- Policies and regulations to promote the energy transition in households, firms and transport
- Impact evaluation of energy use awareness initiatives
- Analysis of the aggregate and/or sectoral impacts of the decarbonization of the energy matrix
- Transport and energy transition
- Economic agglomeration, energy efficiency, and its role in the energy transition
- Evaluation of financing mechanisms/policies for the energy transition
- Estimation of price elasticities of energy demand in firms/households. Substitutability between energy types or between energy and other production factors.
- Energy transition and stranded assets.
- Inequality and energy transition
- Macroeconomic impacts of the energy transition
- Rebalancing of energy tariffs and prices (efficient pricing mechanisms that reflect the social cost of energy).
- Development of infrastructure to facilitate the energy transition
- Redesigning energy markets, regional integration towards transition
- Challenges and policies for the electrification of industry and transportation

Papers presenting evidence for Latin America and the Caribbean will be specially considered.

IV – Budget

A maximum of three proposals will be selected. Each winning proposal will receive a research grant of up to **USD 15,000** to carry out the project. This grant will be disbursed through a consulting contract signed with any member of the research team or her/their institution. A budget proposal is not required.

V – How to apply

To apply you must fill this online form before **October 30**, at 23:59 (Buenos Aires time) .(Please note that you need a google account in order to apply.) You will have to upload the following three pdf documents:

(i) Research proposal: it should be **a maximum of 1500 words**. We will value a clearly stated research question, and well-suited models, data, and empirical approaches to address the question. Proposals that surpass the maximum length will not be evaluated. The project must produce novel knowledge. The proposal must describe the stage of the project at the time of submission (initial stage, some advances, very advanced).

(ii) Research team: this document should list the team members, including full names, affiliations, and email addresses.

(iii) Lead researcher's CV.

VI – Activities, deliverables, and schedule

Winning proposals will have eight months to complete the project. The time schedule is:

30-oct-2022	Proposal **submission deadline**.
18-nov-2022	**Notification** of winning proposals.
Apr-2023	**Submission of the first draft** of the working paper, including preliminary results.
Apr-2023	**Presentation of the work in progress**, in a closed-doors academic seminar organized by CAF. This seminar will be held virtually or in person, subject to the organizer's decision. Should it be in person, CAF will cover the expenses for economy-class air-fare and lodging for one author per project.
Jul-2023	**Final submission**, consisting of a completed **research paper** and a short **policy brief** highlighting the main results. The paper will be published in the CAF's working paper series, and after that, authors may freely submit their papers to any academic journal. Both the paper and the policy brief should follow a template that will be provided by CAF to each winning team.

VII – Selection committee

The committee in charge of the selection decisions will be composed of Natalia Fabra (Universidad Carlos III de Madrid), Juan Pablo Montero (PUC-Chile), Pedro Hancevic (CIDE), Ernesto Schargrodsky (CAF), Fernando Álvarez (CAF), Lian Allub (CAF), Walter Cont (CAF) and Juan Odriozola (CAF)

VIII – Contact

You can find answers to frequently asked questions in this document. If any questions remain, please contact us at investigacion@caf.com.